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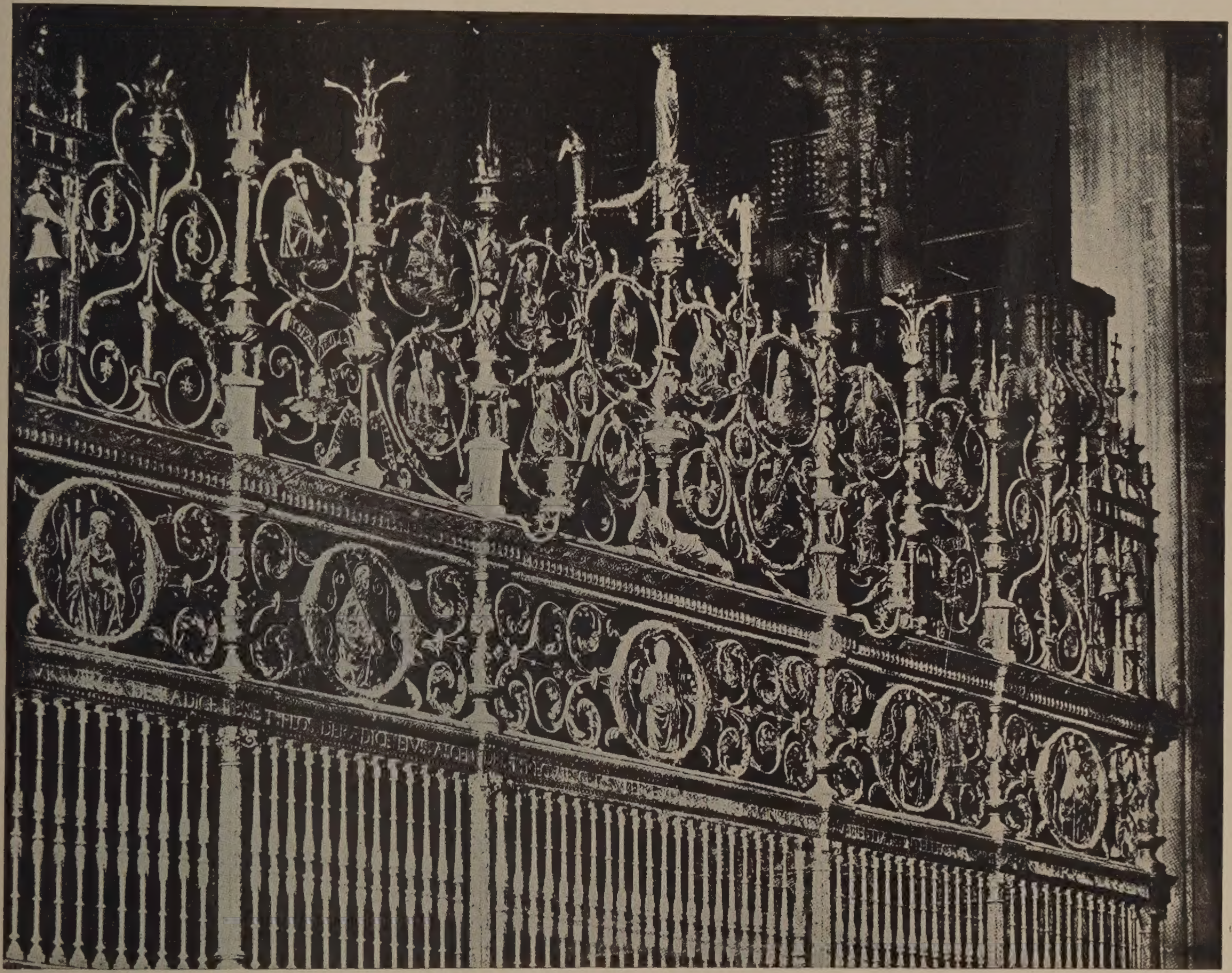


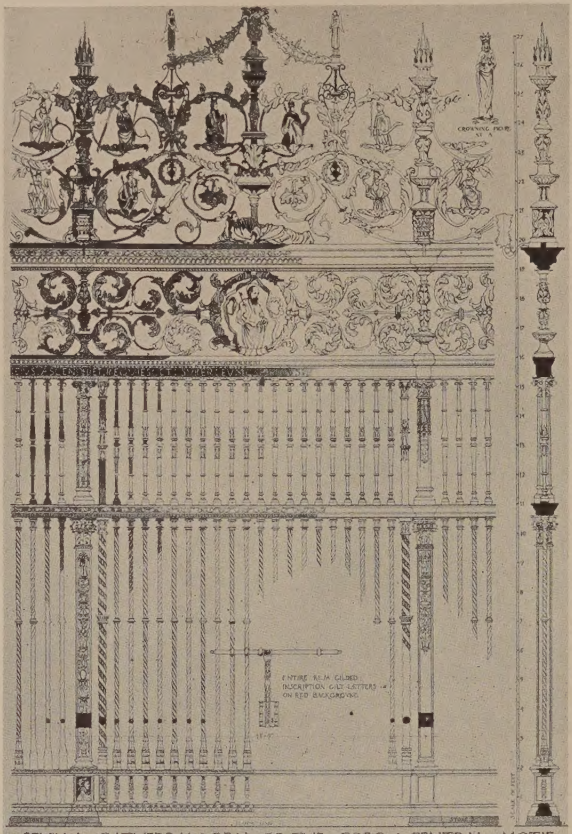
DETAIL, REJA OF THE CORO (1519) SEVILLA CATHEDRAL. REJERIA OF THE SPANISH RENAISSANCE.

II. REJERIA OF THE SPANISH RENAISSANCE

REJA OF THE CORO, SEVILLA CATHEDRAL

AMONG the ironworkers who enriched Seville Cathedral in the early Sixteenth Century was Sancho Munez, whom the Chapter summoned from Cuenza. Cuenca in that day must have been a busy center of ironcraft, for we learn that Sancho, when the ecclesiastics had approved his design for the coro, returned to his native town to select artisans who could help him execute it. The following year, 1518, he made the lateral screens for the capilla mayor, which are very handsome, and in 1519 started on the one for the coro. That he worked in sympathy with his fellow rejero of the capilla mayor is evident from the general harmony of their productions. The actual proportions vary in accordance with the natural tradition that the main chapel should have the grander Reja; but the feeling of both shows a studied agreement.

In the Reja we are considering, the lower portion, or

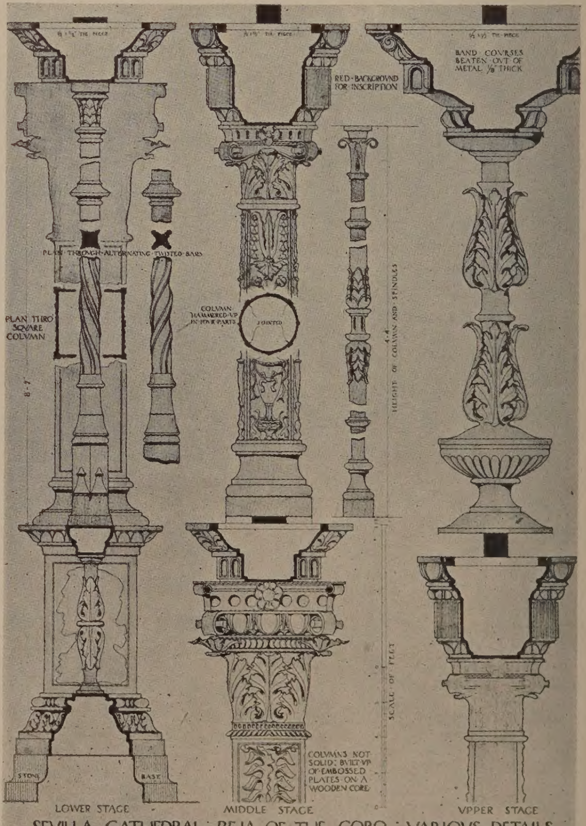

CROWNING PIECE
ENTIRE REJA GILDED INSCRIPTION GILT LETTERS ON RED BACKGROUND

SEVILLA CATHEDRAL : REJA OF THE CORO : CENTRAL MOTIF

body, is composed of twisted Gothic bars surmounted by a tier of short Renaissance spindles. As may be seen in the illustration of the central motif, the twists are of two different alternating sections, each spiraling towards the other. This portion is divided vertically into five bays by six-inch square pilasters, these being the usual wooden core covered by an exquisitely embossed sheathing of iron. The beautiful Corinthian capitals crowning them, though only thirteen inches high, are most intricately conceived—not along the lines of stone Corinthian, but as a truly wrought-iron interpretation. The delicately twisted volutes, for instance, are not, as in modern examples, hammered and pounded out of a block of metal, but are twisted out of a tongue-shaped piece and allowed to roll themselves naturally like the sheet of parchment which, tradition tells us, first inspired the form. Horizontal courses and cornices are beaten out of sheet metal just as the pilaster sheath is, making a lavish display of the embosser's skill. For all sheathing the metal is only one-sixteenth of an inch thick, kept rigid by transverse tie-pieces one-half inch square. The band course crowning the balusters (which is anomalous to the architrave of the entablature in architect) contains a gilt inscription effectively backgrounded by red. Above comes the frieze, three feet high, comprising medallion heads of five Apostles; then a heavily moulded and fretted cornice, and surmounting this the most resplendent portion of all—a cresting representing the tree of Jesse. Each of its dignified personages is framed in a circle of foliation, and the whole design is divided vertically by towering candelabra which form a natural termination to the structural members below. A facetious innovation introduced here, and one with a practical purpose, is the bell frame at either end. These little features are charming in design and execution, and have a certain value as a substantial end-motif to such a highly imaginative cresting.

It is on record that Sancho Munez, while engaged on this masterpiece, "lived in the house of Canon Martin Navarro, to whom the Chapter regularly paid his board;" further, that he was to receive "two hundred gold ducats a year provided he took no longer than one and one-half years for gilding and all." That such a colossal and varied creation, beaten up out of raw ingots, could be finished in the stipulated time is a strain on modern credulity; but as one Spanish writer records that it was, we must accept it and acknowledge that the feat could never be repeated in our own day.

The Reja of the Capilla Mayor or High Altar and that of the Coro facing it are both mighty Plateresque erections. They are two of the largest in Spain, and, being lavishly gilt, are indescribably sumptuous seen glittering in the dim light of the cathedral, like some vast bits of gold lace heavy enough to stand of themselves on edge. The Reja of the high altar was wrought by the celebrated Friar, Francisco de Salamanca, who produced it between 1518 and 1533, having previously gained much experience by making a beautiful late Gothic screen for the Monastery of Miraflores outside of Burgos and another for the Monastery of Guadalupe in Estremadura.


BAND COURSES BEATEN OUT OF METAL ⅛" THICK
RED BACKGROUND FOR INSCRIPTION
PLAN THROUGH ALTERNATING TWISTED BARS
PLAN THRO SQUARE COLUMN
COLUMN HAMMERED UP IN FOUR PARTS
JOINTED
HEIGHT OF COLUMN AND SPINDLES
8'-7"
4'-4"
SCALE OF FEET
STONE
BASE
COLUMNS NOT SOLID: BUILT UP OF EMBOSSED PLATES ON A WOODEN CORE
LOWER STAGE
MIDDLE STAGE
UPPER STAGE

SEVILLA CATHEDRAL : REJA OF THE CORO : VARIOUS DETAILS

THE RELATION OF THE POTTER TO THE ARCHITECT

BY LEON V. SOLON, R. B. A.

FEW of the minor arts of the Moyen Age and Renaissance show much evidence of contact between the Architect and those responsible for their artistic rendering, this being partly accounted for by the self-contained organization of the Guilds.

It is very noticeable in the work of the potter during these periods; though excellent examples might be cited to contradict this statement, an exhaustive examination would prove them to be exceptions. By comparison, clay products show a lesser artistic development than that found in materials which might be described as structural, *e. g.*, stone, wood and metal; these, constituting the edifice itself, demanded the Architect's personal attention, not only with regard to design, but also in control of treatment, from the inception of the work.

Many tile pavements still existing in Gothic churches are an aggregation of repeated detail rather than a composition controlled by the exigencies of plan. Frequently design was merely pattern assembly, and obviously a matter of minor importance to the master mind; the fact that the decorative detail employed was identical with the ornament used in the glass, was apparently considered sufficient.

There are abundant signs of stunted growth in development of the artistic side of the product, proving that in this respect the potter was left to his own resources, being compelled to borrow his patterns from the sister craft of painted glass; this he did with a thorough appreciation of the limitations of his material, justifying his plagiarism by evolving a strong individual note in his translations.

In reviewing notable past achievements in clay, the highest attainment is reached in objects which are complete in themselves, and not where they figure as an important item in a great conception. As a collaborator the potter's record is poor, this being partly due to the limited adaptability of his material, and possibly to a curious instinct common to most potters to envelop their processes in an atmosphere of mystery.

Even when Romance has touched their famous men—from a safe distance—the potter has encouraged stories involving technical absurdities to become tradition by his silence.

For nearly 300 years poets have sung of the art of Palissy, who, in extremity, burned his furniture to fire his wares—a delightful and pathetic story; delightful if one considers the enormous quantity of household chattels the potter of that period must have possessed, assuming the oven in question was adequately fired; and pathetic when experience enables one to surmise the appearance of poor Palissy's glazes, drawn from an oven fired with what would represent the outfit of a large modern establishment.

When spontaneous artistic impulse has searched for new objectives, technical obstacles have discouraged a choice of the potter's craft. These impulses are usually traceable to those waves of fashion which so frequently ruffle the surface of the higher arts; a handicraft being adopted, and, in proportion to the mental effort expended on its manipulation, it is invested with the dignity of an art.

Sudden demands of this nature for proficiency and technical attainment, though they are not likely to produce the Master, may nevertheless attract one sufficiently to induce him to handle the material himself, or to give the benefit of his guidance to the interpreter of his ideas, thus establishing new ideals beyond the traditions of mere industrial effort.

Achievements of this nature in turn stimulate the mentally adventurous among the free lances who always form part of the artistic community, encouraging them to adapt their facile temperaments to thinking in the favored material, and by their ingenuity multiplying its methods and applications.

There are few instances of such occurrences in Ceramics; probably the most notable being that of the sculptors Andrea and Lucca Della Robbia, who developed a new range of plastic possibilities, a legitimate manner of treating architectural sculpture with imperishable pigment, and accentuated many of those beauties lying hidden in gross material, which only reveal themselves to the select few.

To-day Architects of this country are practicing a greater fastidiousness and discrimination in the choice and assembly of material than is discernible at any other period.

Part of the imaginative process of constructing an effect, is the mental review of available resources. At that moment "tile" taking its place in the procession, pays daily the penalty for its lack of decorative attainment. To one wishing to break new ground, the first impression is that of utilitarian purpose, followed by regret at commercially imposed limitations, which up to very recent times have impressed their industrial brand on one of the most interesting and ancient of industries.

It must be admitted, reluctantly, that tile owes its reconsideration to-day to the defunct Art Nouveau movement, though not to the abominations with which it was decorated under this sad influence. With simplicity as a watchword and naivete as a method, attention had necessarily to be paid to texture, and to the personal impress of the worker, few materials giving greater opportunity for demonstrating this than clay by its plasticity, and glaze by its enormous range of color and texture variations.

Many prominent in the architectural profession to-day foresee in this material vast undeveloped wealth of decorative resource, and appreciate that the starting point has been found from which the pioneers may safely start to explore, returning laden with treasure of color for their art.

Deep consideration as to means of bringing about a beneficial and creditable expansion in Ceramics as an accessory art, resolves itself in one conclusion, viz., that regeneration will only be effected through the Architect's appreciation of the craft as an asset in his schemes, and that the potter on his side will place all technical resources frankly before him, adjusting his material to meeting conditions, instead of entrenching himself behind a limited commercial equipment.

The frequency with which certain questions are asked the tile man gives one the impression that there must be a considerable amount of haziness on certain every-day detail which could easily be dispelled. The following are some of the questions most frequently asked:

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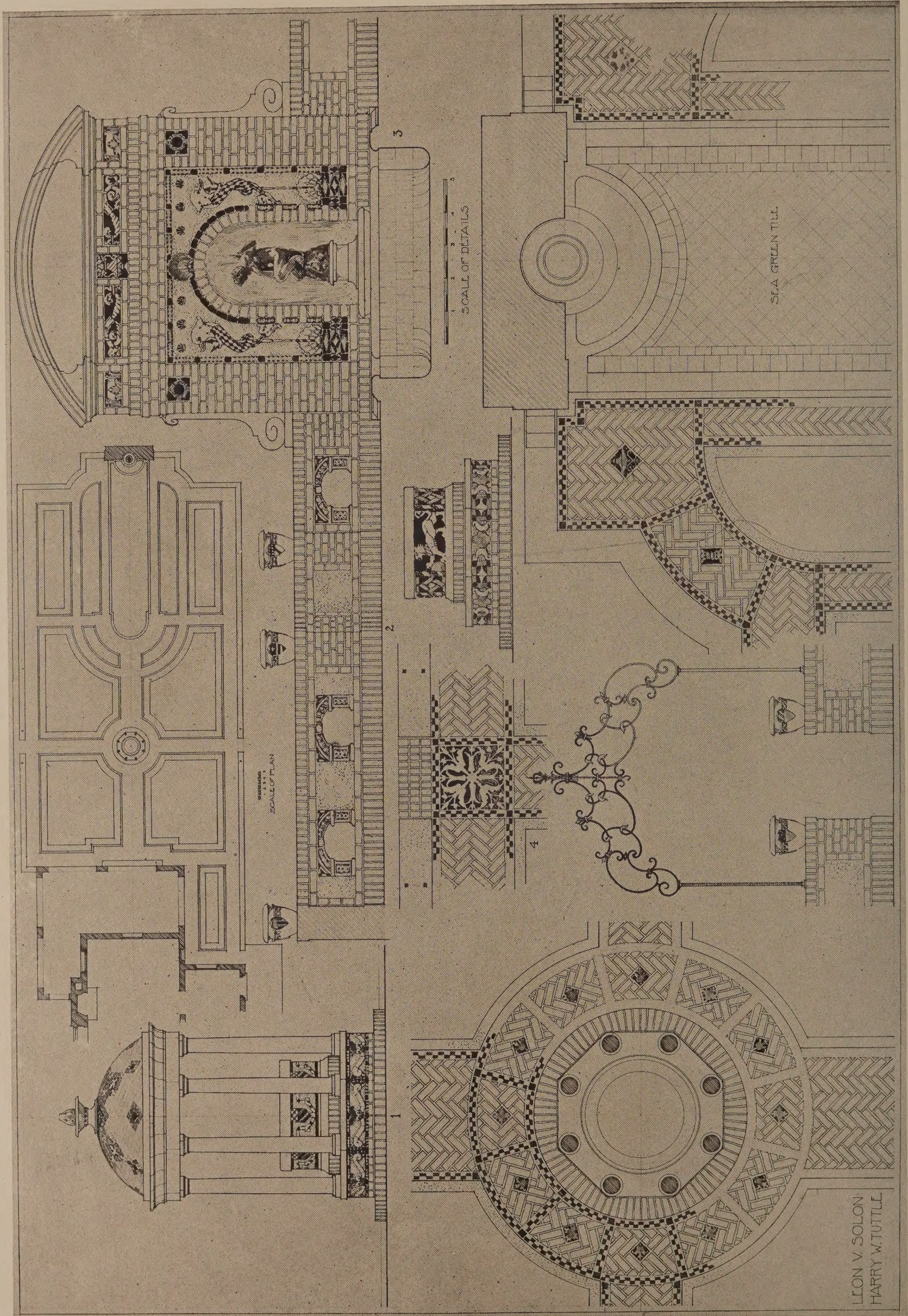

GARDEN DETAILS SHOWING APPLICATION OF ORNAMENTAL TILES.

(Continued from page 195)

How long will it take to execute a Faience order?

This query is best answered in quoting H. D. Lillibridge, one of the foremost technicians and organizers in the pottery industry. He writes as follows:

"It is hard to give a comprehensive answer to the inquiry of how long it takes to execute an order of Faience, as of course the conditions depend entirely upon the kind and amount.

"For the sake of illustration, I might ask how long it would take to build a house; you would naturally ask me, how large and what kind of a house.

"This is exactly the situation with the Faience; but in general I think it could be stated that according to the detail and size of the job, the plainest types can be executed in about six weeks' time, with the more pretentious treatments of average quantities increasing in the time required for execution from six weeks to six months.

"After the treatment has been decided upon, and the design with plans of the spaces to be covered reach the factory, the first step is the execution of structural drawing, layout of the job and the clay shrinkage plan in full size for all shapes.

"Following this comes the modeling in clay, casting in plaster, mould making, pressing of the clay in plastic form into the shapes which become the tiles. The drying of these plastic pieces follow, with the biscuit or body firing of the tile.

"Next the glaze is applied through gloss fires of one or more kinds according to the treatment; and if decorative features are embodied, additional fires are necessary for these, such as gold, lustre, etc.

"After the finished product comes from the kilns the assembling and keying of same must take place according to the layout plans, after which the packing and shipping follows.

"With these numerous steps, each one requiring its minutia of detail, an idea of the different procedures in the manufacture can be made comprehensible, with an appreciation that time is an element that cannot be unreasonably shortened in any of the progressive stages of manufacture."

What constitutes durability in a tile?

This depends entirely on the density attained by firing at a continuous high temperature, producing what is technically termed "vitrification." Lack of appreciation of this quality often influences an Architect's artistic sense to specify red tiles which possess a certain "bloom" reminding him of the picturesque roofs of Southern Europe, in places where they will have to sustain wear and endure exposure. This attractive feature is a characteristic of partially fired clay in which the stage of vitrification has not been reached by adequate firing. These absorb moisture and are short lived owing to the fact that in unprotected places the water held in the body by its porosity, freezes, breaking the tile, or causing portions to flake off.

In glazed tiles, which is the harder, a red clay body or a buff Faience body?

A belief sometimes exists in favor of the former, which, however, does not withstand technical criticism or argument. A well adjusted Faience buff body contains a large proportion of ground biscuit, which forms a neutral element of cohesion through having lost its contraction; this permits the heat to be increased to a very high point, without affecting the surface or contour of the tile. The red body tile, being made entirely of a material from which no element of contraction is taken, warps and fuses when fired alongside the former; it is only fair to add that there are all grades of Faience body possible, the foregoing remarks refer to both types in their perfected forms.

What kind of tile may be safely used for exterior decoration?

Highly vitrified tiles only. The danger in using semi-porous tiles has been brought home to many Architects, much to their chagrin, and the detriment of their effects, particularly in glazed tiles.

In glazed tiles it is simply a question of the resolution of natural forces; the porosity of insufficiently vitrified tile retains moisture, which, when frozen expands. The soft glazes which are extensively used on this quality of material for economic reasons, have, if any, an opposite tendency; in other words, we have the foundation material expanding and the adhesive coating pulling in the opposite direction, until the inevitable happens, viz., the collapse of the minor force, meaning in this case the shelling off of the glaze.

How can hand-made tiles be most readily identified from those that are produced by a press?

The former are made from plastic clay, the latter from clay in dust form, compressed: the plastic have a roughish texture on the back, the machine-made show the smooth impress of the back plate and a mechanical precision at the angles and edges.

In what sizes can Faience tile be made?

Roughly speaking, from one inch square to two feet square, the cost rising and rapidly increasing from measurements exceeding 9x9 in. Almost any simple contour can be cut, avoiding very acute angles and intricate cerations.

A piece the length of which is many times its width is inadvisable, though it would be difficult to lay down any useful arithmetical guide; for example, 6x1 in. would be made with ease, whereas 12x2 in. would result in so high a proportion of loss from twisting as to be deemed impractical in producing quantities.

What qualities may one expect to find included in an order filled from a "Kiln-run"?

In order to neutralize the appeal which this mysterious trade term makes to an Architect's sportive instincts, it is necessary to explain conditions existing in every kiln. A kiln is constructed with flues in such manner that by the draught the flame is drawn to a great length, passing round the saggars or containers protecting the tile. This flame is naturally graded in temperature throughout its length, with the result that at every foot in the height of the kiln the temperature varies. Assuming that at a certain level the firing is ideal, those tiles above this point will be over-fired and under-sized, and those below under-fired and over-sized.

This method of selling is obviously more to the advantage of the maker than to that of the purchaser, and is of great utility to those plants whose equipment does not permit them to distribute a varied product over a number of kilns, by only firing certain types of product in certain places.

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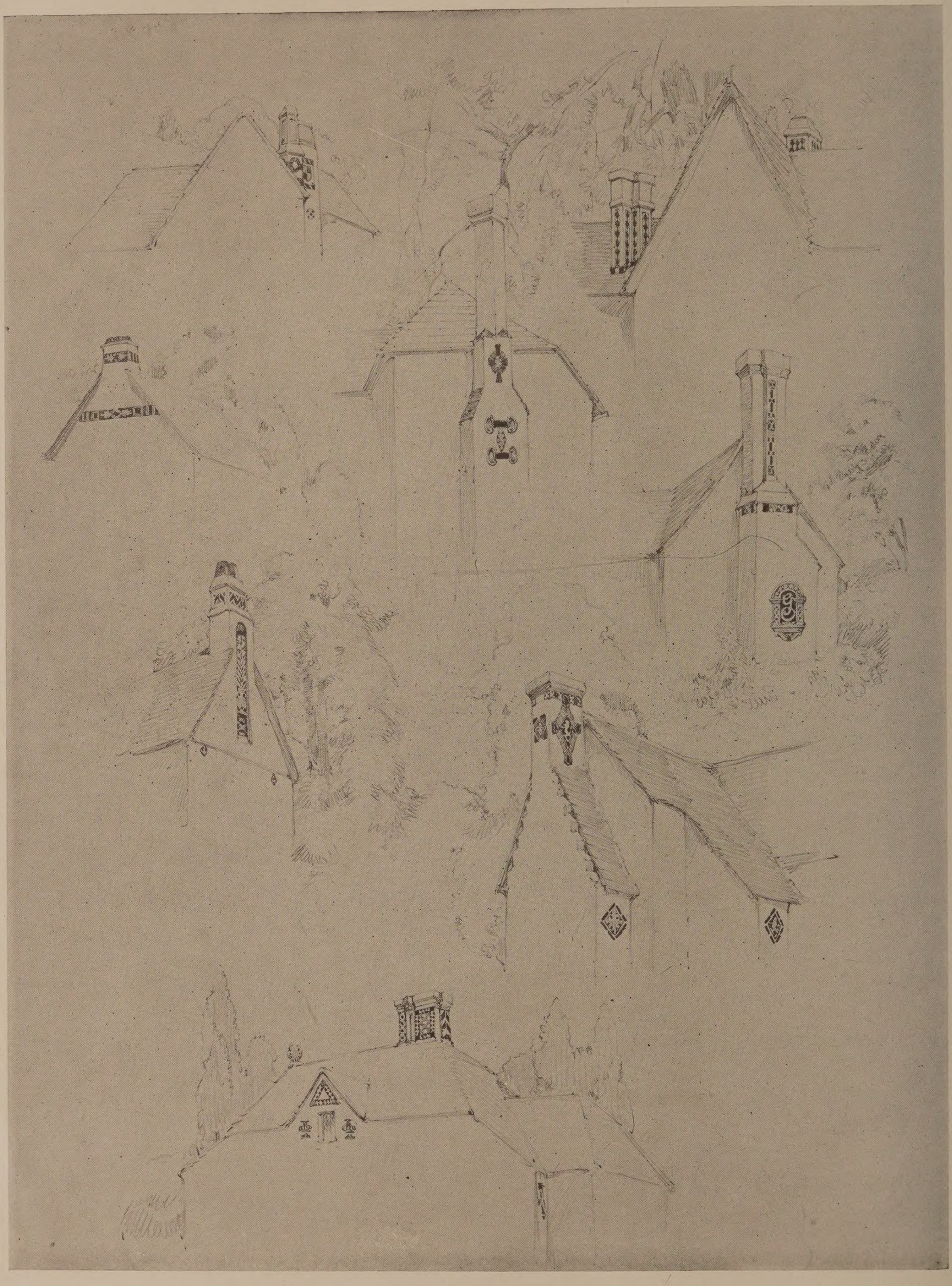


GROUP OF CHIMNEYS SHOWING APPLICATION OF ORNAMENTAL TILE.

(*Continued from page 197*)

WHAT SPACE MUST BE ALLOWED FOR THE SETTING OF WALL TILES?

The distance from the rough coat to the face of the tile is usually 1¾ in. to 2 in.

Space does not permit to elucidate those questions which are always rising in the mind of the Architect who wishes to consider the use of this material from the standpoint of durability and decorative resource. The replies are hard to find for the uninitiated, though they rarely involve explanations of such a technical nature as to make a knowledge of the chemistry of pottery necessary. The principal difficulty is to collect these queries, so that the information may be reduced to a practical issue, and given from the standpoint of the product rendering the readiest service to another man's art. Boundaries of limitation in manipulation must be marked, so that flights of the imagination may always be within these, and never beyond.

In the illustration for a garden treatment a few examples are given showing the many methods of using Faience with brick and cement.

1. The roof of the well consists of 2½x2½ in. tiles, three shades of hard Hispanic glazes combining to make the pattern. The friezes round the well, hand-cut Faience inserted in cement field; Tuscan glazes to be used to give the necessary ancient texture, and to be proof against weather conditions. The band round the step to be treated in the same manner.

2. The garden wall introduces the feature of Faience arches in Elizabethan treatment, propping the appertures, these to be treated in a hard glaze, semi-opaque, of the Hispanic order, which will give color variation by its varying thicknesses on the embossment; this anticipates the objection to the crude "new" appearance characteristic of the old-fashioned opaque matt green, and creams.

3. Wall Fountain. The dolphins will be executed in hand-cut Faience made in sections, embedded in a cement field; the checkered design of the scales would be produced by outlining of the pattern with a false joint, this obviating the confusion arising from assembling a large number of small pieces; these joints to be filled with cement when set, giving a mosaic effect. The shell above the arch in low relief; bright hard glaze of the Chinese order. The panels to be glazed in Tuscan or Hispanic glazes, either of which will give the necessary broken color. Figure, Faience with Ming bright glaze.

4. Panel at intersection of paths, flat decoration, black and golden brown, Tuscan inlay. Inserts in brick work to be roughly modeled and glazed in two Tuscan glazes.

The illustration showing a few ways of introducing spots of interest in the chimneys of country houses is self-explanatory, and is only intended as a dim sidelight on the great field awaiting development.

At some future date I will take up other architectural items and show by suggestion the adaptability of the potter's craft to the minor embellishment of the Architect's schemes.

THE SELECTION OF THE ARCHITECT

A circular of suggestions to all persons interested in building operations published by the Iowa Chapter A. I. A.

PERSONS who have never employed an architect are apt to be at a loss as to the proper way to proceed, while many who have had some experience are not fully posted in the matter and are more or less unfamiliar with the intricacies of architectural practice.

They may not understand that it is a *profession;* calling for men of the highest integrity, business capacity and artistic ability; to command respect and confidence as advisers, and to sustain a grave responsibility to the public. No one may have given them any practical information as to the relations that should subsist between client and architect. This may seem a simple matter, but experience has shown that lack of information on this subject is one of the most fruitful causes of trouble in building. As a brief outline of vital elements in building operations, the following is respectfully submitted:

1. The owner's interests are to secure the most available service, suitable design, best construction, most economical expenditure of funds. These can be obtained only by employing, not as a luxury, but as a necessity, an expert, a competent and reliable architect. The owner will be most benefited by choosing an architect before deciding upon anything else connected with the building project, (in many cases even before fixing the building site and limit of expenditure), thereby gaining from the start to finish the services of the expert's technical experience and knowledge in every phase of the problem.

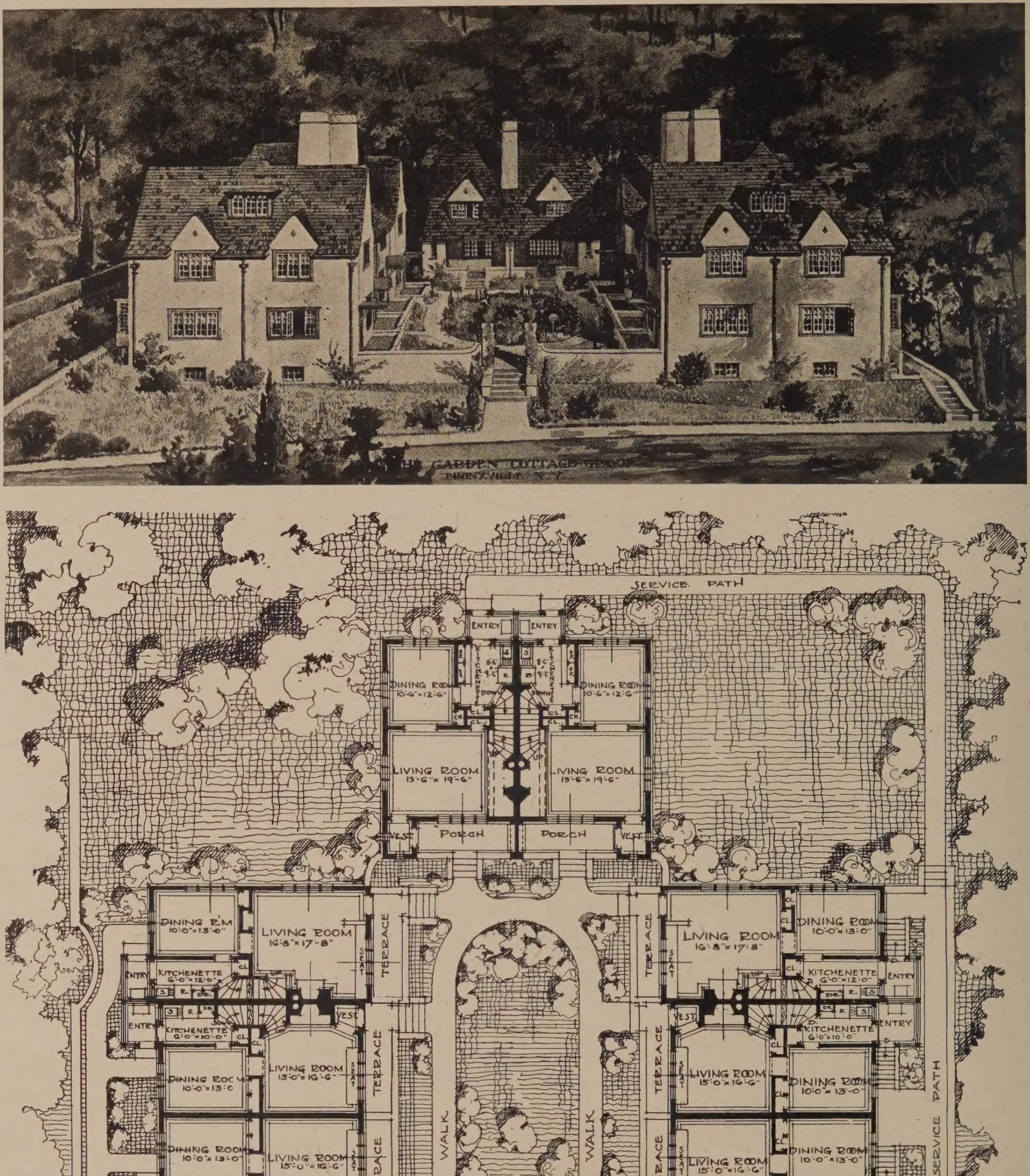
2. Architecture in its highest element is a fine art—it is never a *trade.* The architect's practice is upon the same basis as that of the physician and the attorney; each is a *profession,* and selection should be on exactly the same principle, upon record for character, integrity, ability and fitness for the service; a sensible, business-like, time and trouble-saving method.

3. The planning of a building is a process of evolution. Nothing but the full working out of the problem can produce this. The architect is a sort of clearing-house, in adjusting a multiplicity of ideas, wishes, needs, financial and other details. It is practically impossible for an advance program to be an absolute guide to the best eventual scheme. The data compiled by an architect for such purpose may be quite different from that which at the start suggested itself to either owner or architect. The owner should get the benefit of his architect's best ideas and various solutions of the problem from which to select, not simply what is presented to strike the attention, and "get the job."

4. Architectural competition is usually a handicap to the end sought. The functions of an architect are many and varied; he can be judged better by his reputation and completed work than by a preliminary sketch which represents merely one of his minor duties.

Do not expect competitive designs any more than gratuitous diagnoses, prescriptions and briefs. Plans are not like merchandise, kept in stock to fit all individual needs; the model plan exists only for its individual place and condition; each building requires special time, study and labor—the architect's capital.

(*Continuea page 201*)



PERSPECTIVE AND PLANS, GARDEN COTTAGE GROUP, BRONXVILLE, N. Y. Bates & How, Architects

(Continued from page 199)

5. Competition may be the "life of (mercantile) trade," but it is a delusion and a snare in professional practice, as history shows, fraught with evils and pregnant with danger, alike to client and architect. No less than forty-seven different forms of evil have been enumerated, due to the actions of clients as frequently as to architects.

These inherent evils have developed so persistently that rarer than angel's visits have become the competitions that have resulted satisfactorily to all concerned.

6. The unethical and uneconomic principle of "something for nothing," that allures some minds, coupled with the prevalent ignorance of correct architectural practice are responsible for an intolerable condition, in which so gross, deplorable and common has the lack of sane business-like action, justice and good faith to client and architect alike become, that self respecting and upright architects more and more refrain from all conpetition.

7. It is often impossible to correctly weigh the relative merits of contestants, by hearing them present claims for considerations, and equally impossible to weigh the relative merits of preliminary sketches, rapidly reviewed in the limited time ordinarily accorded to the task.

8. The selection of a design should not be limited to the few that a competition may bring forth. The owner and chosen architect in intimate co-operation should carefully consider all accessible prototypes and alternative studies necessary for the perfecting of a fitting solution of the problem.

9. Designs presented in competition are likely to be the product of clever draftsmanship calculated to hypnotize; instruments for working *at,* rather than *with,* the owner. With competitive drawings it is difficult to disassociate the excellence of the design from that of the catchily rendered drawing, or to determine to what extent the one presenting the drawings is to be credited with the design, since their preparation is easily assigned to a picture maker, by whose handiwork it is absurd to judge the architect.

10. The date set for holding a competition may be one unavailable to the best possible architect for the work; again the time limit for preparing the design may be inadequate for proper study; and furthermore he may not care to devote the time and expense necessary to a competition "gamble," hence the selection is limited to the less capable.

11. Such competition is a severe temptation to employ tricks of draftsmanship and promise of more than can be performed in the way of securing a desirable structure at a given expenditure. Since all want the most that can be had for the appropriation the unprincipled competitor who will lie the most convincingly, is too often the successful one. His inability to make good manifests itself too late.

12. Employment of an architect on the basis of the amount of commission, another public fallacy, does not in any way represent a wise measure. "Penny wise and pound foolish" applies most appropriately to the attempt to practice economy (?) by choosing for cheapness, merely to save (?) the fair price for good service.

An incompetent man doing work for a lower percentage might easily use ten to twenty or more per cent. of the cost of the completed structure in wasteful use of material, inefficient planning, missimproved opportunity, costly and unnecessary construction, with unsatisfactory results; whereas a competent man charging a higher rate for his services could give a very much higher percentage of return for the investment of funds.

A dishonest man, by trickery and illicit commissions from material and construction contractors, can easily augment his receipts to a larger amount than the upright one's fair fee direct from the owner, thereby proving more costly in the end, for it all comes out of the owner just the same.

13. Different architects, like doctors and lawyers, place different values upon their services, and their services likewise vary in merit and results. This should not confuse the owner—the best is likely to be the higher priced. It is safe to rely upon the reasonableness of the rates for minimum fees and principles of practice as recognized by the leading representatives of the profession and the higher courts.

Good service can be maintained only by at least a charge that experience by the large majority of the reputable practitioners and clients testify to be fairly remunerative, and by methods that insure equitable relations between owner and architect.

THE GARDEN COTTAGE GROUP

BATES & HOW, ARCHITECTS

A group of buildings now under construction on the lower part of the Bonner property west of Sagamore Road, Bronxville, N. Y.

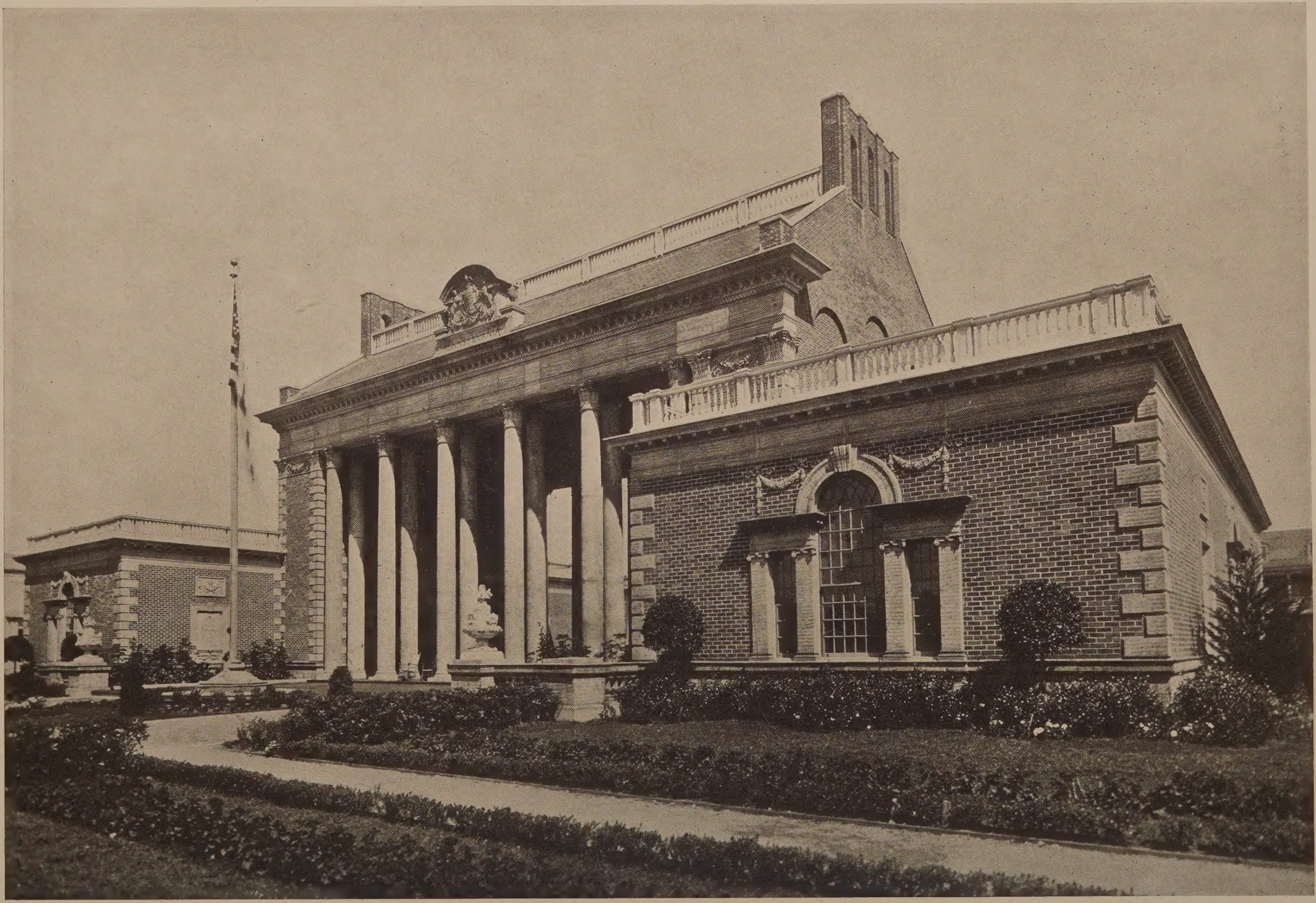
THIS development which represents something entirely new in Bronxville, or for that matter in Westchester County, has already created much interest and comment in the village. The group system of construction, while popular and common in places in England, such as Letchworth, Hempstead and other garden cities, has as yet been comparatively rare in this country, the only actual groups to be constructed being at Roland Park, Baltimore, and by the Sage Foundation at Forest Hills.

The object of the present work on the Bonner property is to ascertain in a small way, the desirability of such construction for Bronxville needs. The plan, which is by Messrs. Bates & How, Architects, provides for a group of ten small houses built about a hollow square to be owned and used in common by the occupants. The houses are in two groups of four each, flanked by the building of two cottages. The design and plan is carried out in the exquisite manner that is indicated in all the work of Bates & How.

The group will have a common heating system and other necessities, such as care of the grounds, etc., and will be managed upon a community basis.

The individual cottage units are small and are designed to supply attractive and artistic little homes at a minimum cost. In plan they consist of a living room, dining room and kitchenette on first floor and two bedrooms and a bath on second floor, besides one large bedroom in attic and an open cellar under the entire house.

The experiment of the group system and its adaptation to American ideas, and particularly to the Westchester suburbs, will be watched with much interest throughout the county.

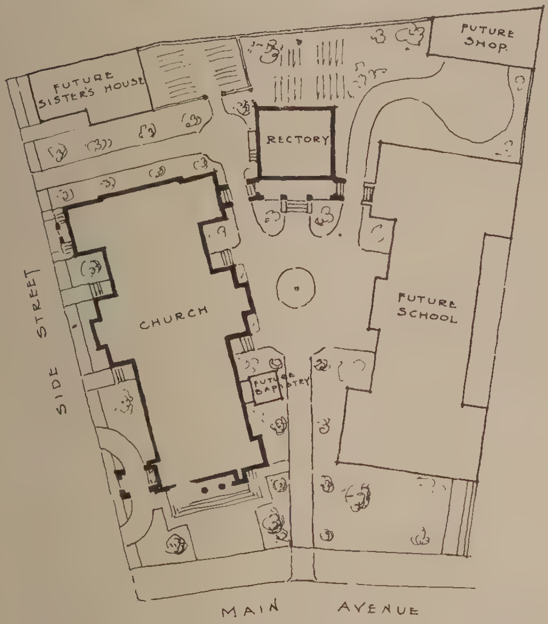


PENNSYLVANIA STATE PAVILION, PANAMA-PACIFIC INTERNATIONAL EXPOSITION, SAN FRANCISCO.

Henry Hornbostel, Architect.

ST. ALOYSIUS R. C. CHURCH, GREAT NECK, L. I.

BY GUSTAVE E. STEINBOCK



GROUP PLAN, ST. ALOYSIUS PAROCHIAL BUILDINGS, GREAT NECK, L. I.

ST. ALOYSIUS CHURCH (Plates LXXXVII-XC) is built in the Lombard style, which, with its simple and massive construction, suggests a quiet retreat.

The exterior is built of salmon colored rough brick laid in ½″ white, raked out, joints.

The ornamental frieze and bands are produced by a brick and cement panel design of various motifs. Besides the two columns in the Portico, and the cornice thereto, little limestone is used. The piers forming the corners of the portico are each to be topped off with a group of two figures, and an escutcheon is to be applied in the pediment above.

Broad steps lead to the portico, from which three doors open into the vestibule, which stretches across from the porte cochere at one end, to the circular stair-well at the other—the latter contains the marble and tile stairs leading to the organ gallery, over the vestibule. From the vestibule double doors lead to the nave and single doors to the aisles of the interior.

The walls and arches are faced with an old gold color brick and three different shades have been used to give sparkle to the composition. The interior facing is laid in white flush joints.

The four columns supporting the clerestory walls forward of the dome are limestone, various allegorical figures are carved in the capitols. The piers supporting the dome and the columns are so placed as to allow an unobstructed view of the sanctuary from the pews. The color effect of the interior walls is enriched by means of tile inserts of various patterns in a band course, running around the interior just below the windows. Other tile panels occur in the frieze and in the pediments over the niches of the transcepts. The predominating colors of these tiles are light and dark green relieved with spots of deep blue. Only in very few instances golden yellow is used.

The interior cornice mouldings are of a cream colored terra cotta.

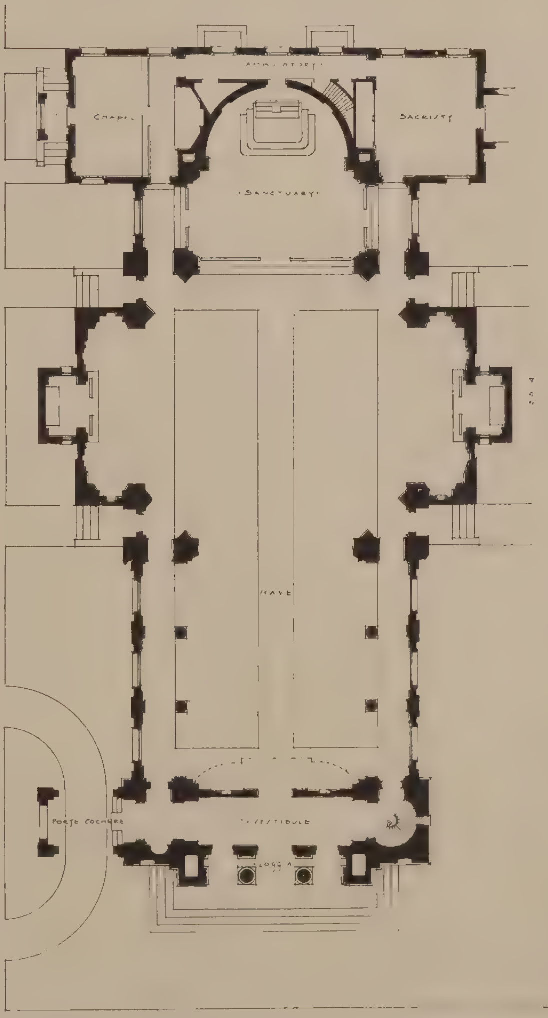
The drum of the dome is decorated by means of brick and cement inlaid design. The base and sanctuary steps are of cream colored marble.

The altar, platform and sanctuary rail are of Botticino marble, all of which are in harmony with the color scheme of the interior. The altar gates are of bronze. The altar and gates were designed by Mr. O'Connor.

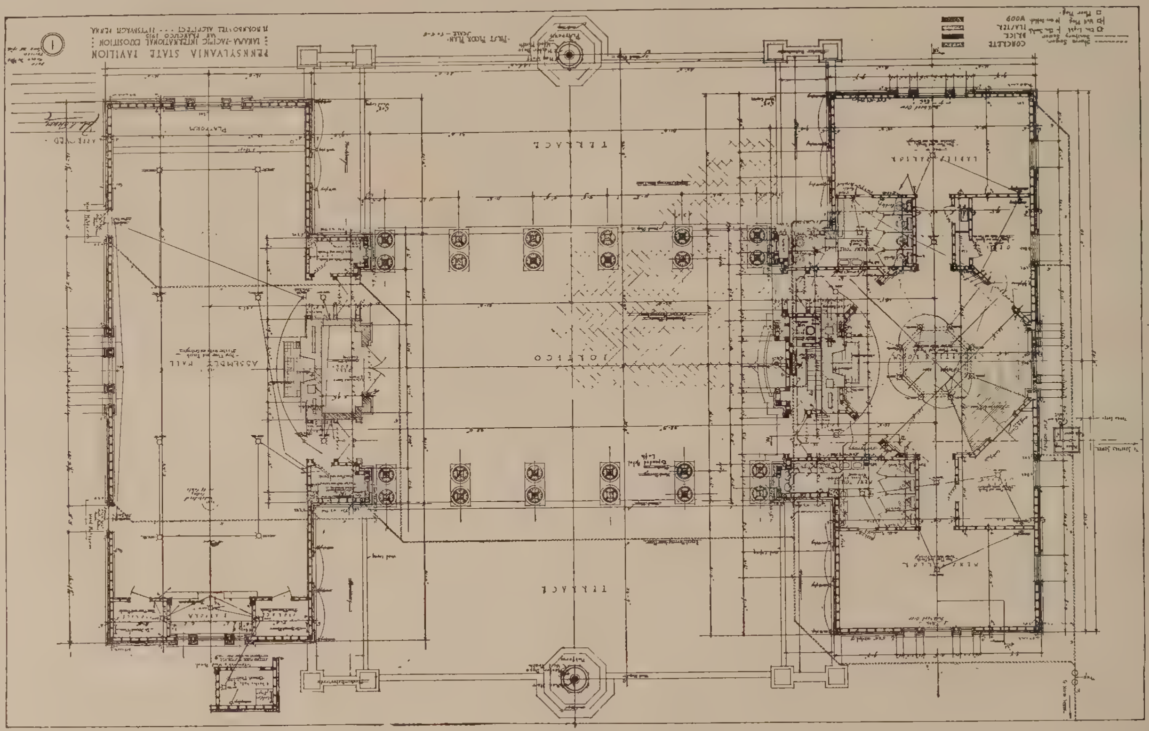
The apse of the sanctuary, and the spandrels of the arches supporting the clerestory are left in stucco to be frescoed in the future. The ceilings throughout, except that of the sanctuary apse, are of open timber construction, stained for the present, to give an old gray wood effect. These ceilings are to be stenciled in future in polychrome.

The floor of the church is of concrete which, with the exception of the pipe galleries, is laid directly on the ground filled in to two feet above the surrounding grade. The finished floor portion under the pews is of wood. The aisles, sanctuary, vestibules, etc., are finished in terrazzo containing Sienna marble.

(*Continued page 205*)



PLAN, ST. ALOYSIUS CHURCH, GREAT NECK, L. I.


PENNSYLVANIA STATE PAVILION
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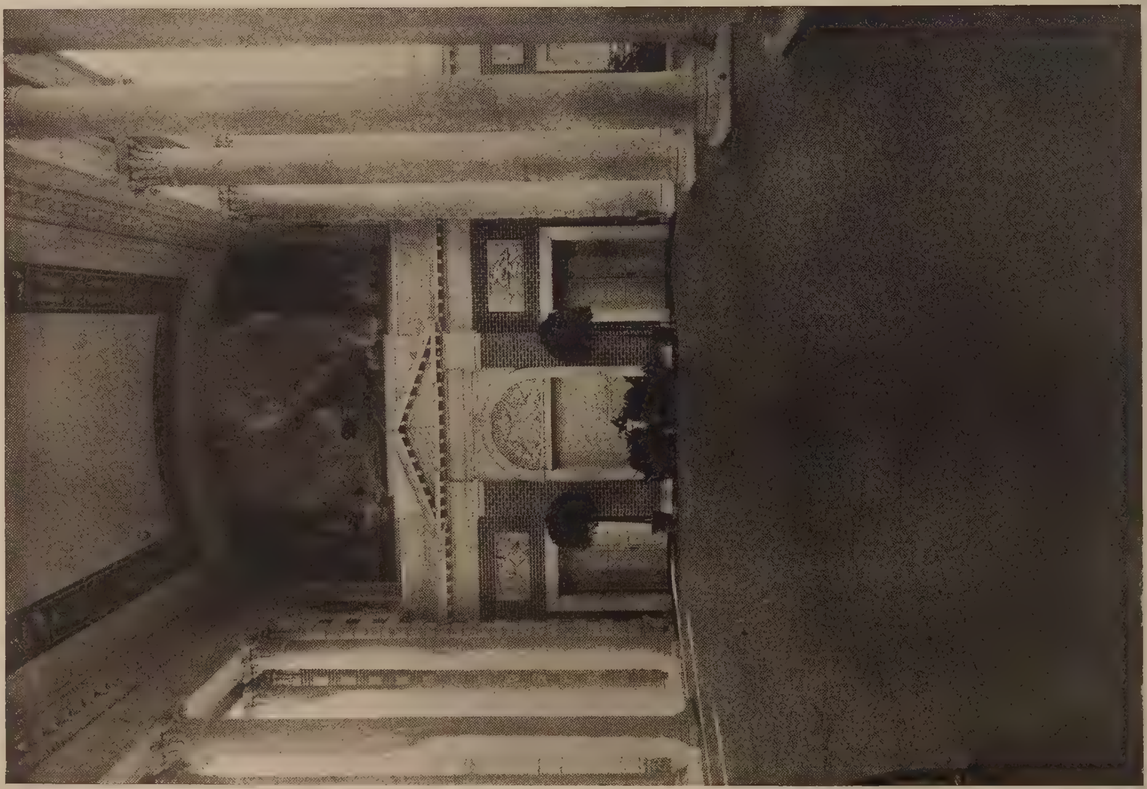
PLATFORM
TERRACE



INTERIOR AND PLAN, PENNSYLVANIA STATE PAVILION, PANAMA-PACIFIC INTERNATIONAL EXPOSITION, SAN FRANCISCO.

Henry Hornbostel, Architect.

(*Continued from page 203*)

The pipe galleries built to a depth of four feet below grade run underneath the side aisle and vestibule floors, connecting with the excavated cellar underneath the sacristy, winter chapel and ambulatory. In this cellar are located the boiler, coal bins and store room.

The chapel besides being reached from the main church through a doorway at the head of the side aisle corresponding to the one opening into the sacristy, is furthermore connected with the latter by means of the ambulatory. The main entrance to the chapel is on the side street. The walls of this chapel, to be frescoed in the future, are plastered, and the ceiling is of open timber construction.

It is hoped that in the colored glass windows to be selected in the future, deep, cool colors will predominate, and the design be harmonious.

From the sacristy a doorway opens on to a covered passageway leading past the front of the rectory. This is to continue to the future school building which will form the third side of the open court enclosure. A basin is to be built in the center of this court.

At one side of the entrance of the court, and connected to the side of the church by means of a small vestibule, there is to be a campanile, containing the baptistry. This campanile will interrupt the long line of ridge over the nave of the church as seen in the broad perspective.

At the rear of the church, and facing the side street, will be the nuns' house with its little garden enclosure attached.

A building containing shops and boys' club rooms at the farther corner of the road will complete the group.

The lighting fixtures were not selected by the architect.

TRUE ORNAMENTATION

BY THOS. S. RICHARDSON

The Architect cannot too assiduously study and cultivate the spirit of true ornamentation, seeking novelty from intelligent observation and adroit conventionalizing of natural beauty.

SOME are apt to think of the brilliant and original-minded designer as a being who rises superior to mere rule and rota. Really the most truly original are the most obedient to law. That which differentiates the artist, or picture-maker, from the designer is orderly method. In decorative design, order alone is beauty; or, whence the grace of the plain dentil course? It is only necessary to put down a certain number of lines and points, geometrically related, to observe how simple are the elements of decoration, given law and order. Scorning this yoke, we fail; accepting it with due humility, we may from the most primitive objects evolve the ornamental. One wild rose, idealized and conventionalized, and a pair of dividers, may provide sufficient material and machinery to bring into being a scheme of decoration. Lacking the mathematical and orderly, a whole summer day's wealth of woodland and hedgerow will not assist us to achieve the decorative. Cram our brains as we may with forms of natural beauty, it is all vanity, unless by earnest study, and the help of the principles of balance and symmetry, we can convert the natural into the decorative; for Nature does not directly suggest it. We must search for beauty. And when we have evolved a decorative unit, we have yet to provide a scaffolding, or framework, whereby the object conventionalized is distributed over and subordinated to the object to be decorated. We may cover surfaces with every conceivable object of beauty, and, wanting a serious geometrical basis, attain nothing decorative whatever. A scaffolding, possibly unobtrusive, but existing all the same, seems as necessary in producing ornamental device as in building.

There are few more beautiful sights than dew-points, sun-lit, on leaves and vegetables; but gorgeous though the effect may be, it no more suggests decoration than the starry host itself. On certain autumn mornings, the mists condense on spider-threads, and lines of glittering gems hang from twig to twig in true, mathematical curves. The effect is here highly decorative. If we seek to contrast the two conditions—the dew in wild and rugged asymmetry and the beads of condensed mist upon the spider-threads—we may find the genesis of the decorative in the geometrical basis, the catenary curve that connects, correlates, and brings under law and order the glistening water-drops. The spider wove the scaffolding; but its form was decreed by natural law.

If we too curiously seek to inquire into the real meaning and import of this fundamental proposition respecting order and the ornamental and decorative, we may fail to find a satisfactory answer; but it may be at least worthy of observation that, in a scale of 10ft., each foot is part of the whole, logically so, and also to the eye; and that, in this way, perchance, when we divide and sub-divide and put ornamental device in set position, mathematically, each such part, division, and object is obviously related to the whole, and so the decorative objects become at one with, and are immediately correlated to, the object decorated. Be this as it may, it would appear a basic principle that the decorative object is subservient to the object decorated. If we do not succeed in this, we may paint pictures; but certainly we do not decorate.

To be a true decorator, it is insufficient to be sensitive to natural beauty. We may be entranced with the rose-in-June, and revel in the lovely mantle of blossom now over the countryside; but in no wise, therefore, may we be the more competent to design a rose-embroidered mat. We may wholly want the peculiar faculty of making an ornament of the rose or its thorny stem, and quite fail to appreciate the significance of the rigid geometrical base, or scaffolding, necessary to transfer the natural into the decorative. In this latter, no doubt, resides the chief efficiency of ornamental device, architectural or otherwise, and the main distinction between good and bad ornamentation. For motif is always with us, if we have eyes that see, and resolutely search for underlying causes; and at the worst we may crib someone else's conception of unit-form of ornament; but to arrange all under a new phase of some law, that shall make one of the decorating and decorated, is an art requiring much study and some aptitude. Hence we suggest the present need not only for investigating the causes of beauty, but of those laws that guide us in trans-

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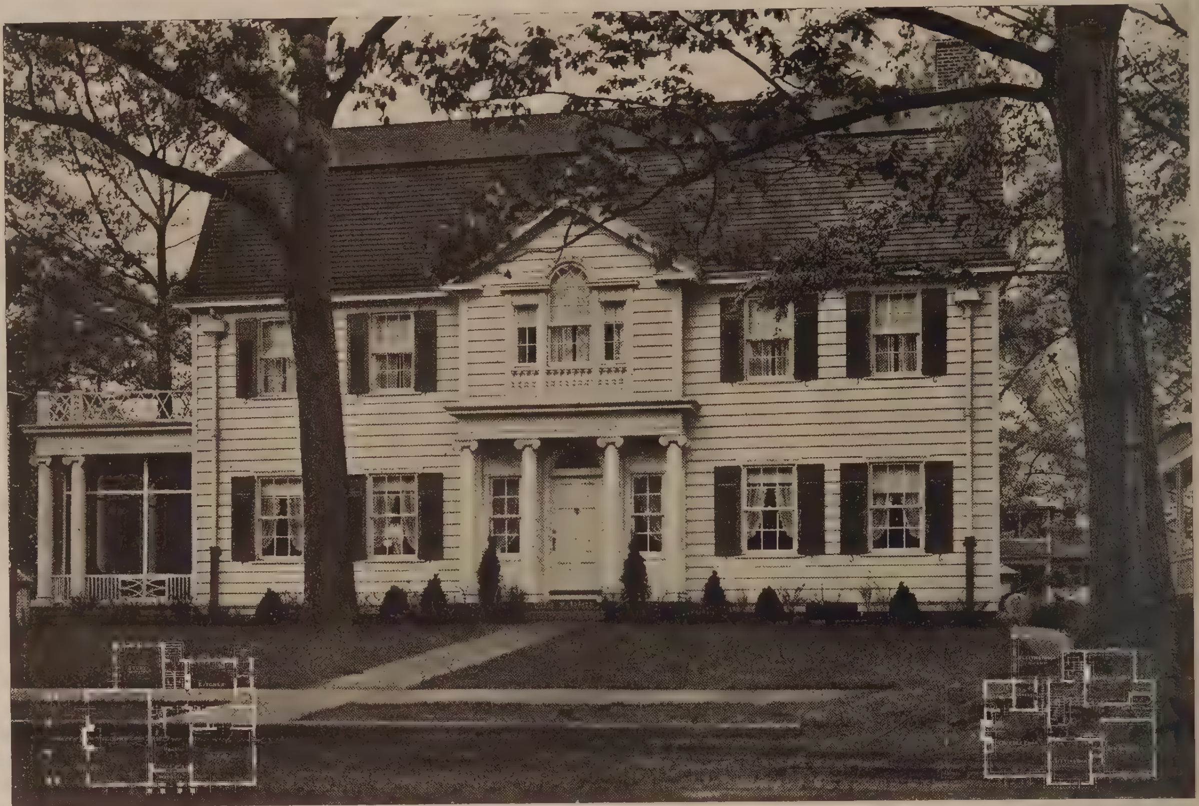
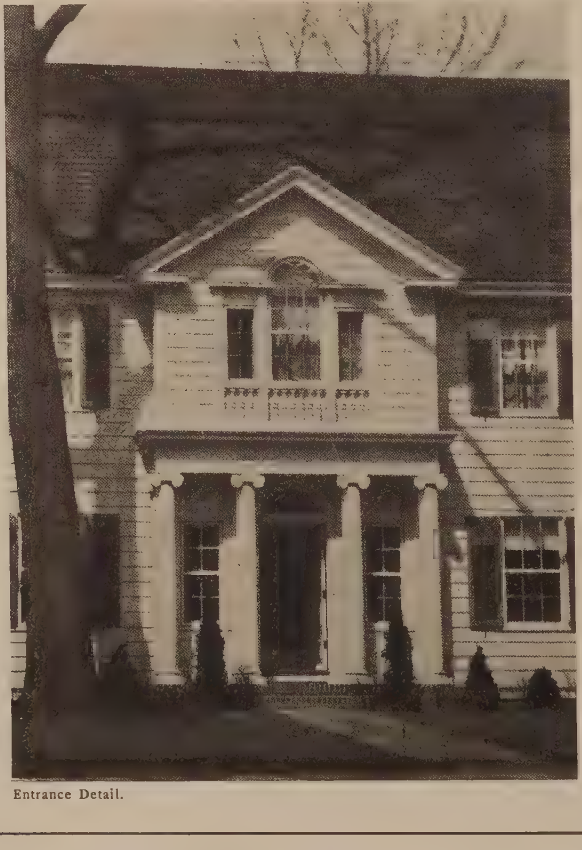
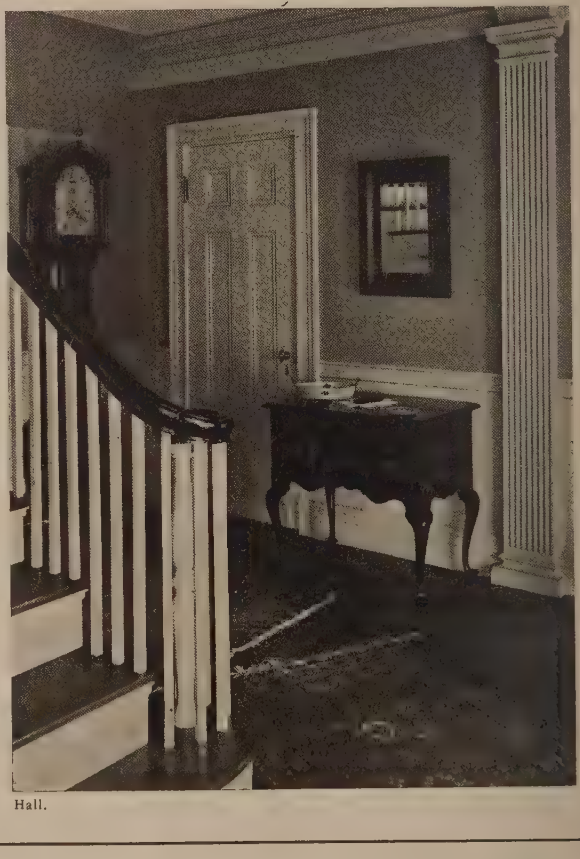


Exterior and Plans.



Entrance Detail.



Hall.

HOUSE, HENRY BREWER, NEW HAVEN, CONN.

Aymar Embury II, Architect.

(Continued from page 205)

forming the wild loveliness of nature into chaste and sober ornament.

Sound, natural motif and knowledge to combine and arrange in true decorative spirit, and the art of subliming, so to say, from the natural to the ornamental, seem the first essentials in decorative art. Above all, perhaps, sound motive and genuine prototype. We become, many of us, after some years, facile in producing, with pen and pencil, curved, floriated form, and too often deceive ourselves, misled by our own easy-going methods. To create novel and pleasing ornament, we must have recourse to natural prototype. This is the hard way; but the truly decorative method —the only one that can freshen our interest in architectural enrichment. There is more of graceful vegetation in creation than mere acanthus. Genuine, natural prototype, and a spirit of law and order, without which we vainly essay to be decorative, are two primary requirements in architectural enrichment. If we remain content to fill in spandrels and the like with aimless right-and-left-hand curving, we may save ourselves trouble, but please no one, least of all ourselves.

We have, then, in ornamenting, to seek out first causes of the beautiful, not merely to draw a beautiful object. And we have to bring our wild rose or honeysuckle under a yoke; and that yoke or scaffolding, obvious or understood, and appearing perhaps as a mere reflex, must at times, like scaffolding, be finally cleared away. In the geometrical basis is the true birth of ornament, decoration, and enrichment. Mathematical severity does not destroy natural loveliness; it seeks to extract the essential spirit. All the grace of its natural prototype exists in the Grecian honeysuckle. For years the Chinese enshrined the vital characteristics of hawthorn blossom in blue-and-white porcelain.

Uncertain, indefinite character and absence of law in assembling the ornamental, seem the defects of the time, as evidenced in the average decorative design of our several arts and crafts. A genuine love for, and study of, naturally beautiful objects, and the art of extracting the elements of beauty for decorative purpose, is the remedy. It is always a relief to turn from our everlasting rococo scroll to the motive of the Japanese. For a small sum we can now purchase metal-ware imbued through and through with evident love of natural beauty, and genuine, natural, mastered prototype. It is a relief indeed from the standard curvilinear nondescript of our cheap silver-ware, and the vermiform appendages meandering over shoddy furniture and what-not?

The architect cannot too assiduously study and cultivate the spirit of true ornamentation, seeking novelty from intelligent observation and adroit conventionalizing of natural beauy. No study is more refining; none more useful to those so often expected to advise in all arts and crafts down to final carpeting and upholstering. Where, for the reward of energy and enterprise, there exists a world of novel beauty awaiting idealizing and conventionalizing or reconventionalizing in a new spirit, it seems folly to keep on dipping into one's own mind, bringing out, again and again, the same idea, founded on nothing, and meaning less. New study of forms suited to decoration and enrichment will give new life and vigor to our architecture. On these lines, decoration, ornament, and enrichment become of living interest, being neither on the one hand the continued rehash of old worn-out themes, nor, on the other, the casting-up of the identical idea we have had, perhaps, "man and boy," for a score of years. If we allot one-half the grace and beauty of ornamental device to the device itself, one-half, certainly, must be allocated to the geometrical basis, or scaffolding. Hence, before ever deciding on the actual form, motive, or prototype for ornament, we might do well to give study to the geometrical framework necessary to the decorative. If we primarily locate mere dots or circles, such are sufficient, plus order, to give the true decorative spirit. It simplifies design, because we can always, later, substitute more graceful and interesting objects. If we commence ornamenting and decorating by concentrating attention upon the decorative object, we may miss true decoration, which, as we have seen, needs to be conceived with an underlying spirit of mathematics, symmetry, and order. We frequently do find failure by reason of too natural treatment. This seems the danger in decoration: to view the work merely with the eye of an artist. Safety resides in clinging tenaciously to square, dividers, and compass, as the practical exponents of law, order, and symmetry, until, at least, such time as our whole theme commences to emerge from primordial indefiniteness, and we can afford to relax a little the leading-strings of the severe and mathematical.

THE GENESIS OF DESIGN

BY F. H. WARNER

IN a state of order, all things stand in reciprocal relation; law connects part with part, and part with whole. In practical design our drawing-boards insure, mechanically, correlation to a certain limited extent; for each horizontal drawn with tee-square is true to base, each vertical is at normal angle. In earlier days, no doubt, the designer wanting accurate mechanical aids would have needed to exercise his mind in maintaining true horizontal and vertical, just as the mason constantly applies line and plummet. It may be that this necessity for continual vigilance gave a certain nobility to the work of the designer in primitive times; that his self-reliance was fostered, and forcefulness and character were engendered. We need but casually look round to assure ourselves that our present-day excellence of instrument and appliance does little to open the eye to an understanding of true symmetry and grace of form; for assuredly we see no end to the production of disorderly and warped architectural mass. We may agree that the basis of design is order, and that order means correlation of part; but the worship of the so-called picturesque in place of quiet dignity, shows that in practice we frequently ignore fundamental principles to which, in theory, we profess allegiance. This is a matter of regret, since if we earnestly seek some guiding rule in design, we may find it in the principle of correlation, whereby each thought and act in design has definite relation to some over-ruling master idea. Holding to this principle, we may be saved from wanton acts, destructive of unity, and make each thought observe a general thesis.

If we inquire why mere geometrical correlation, mere

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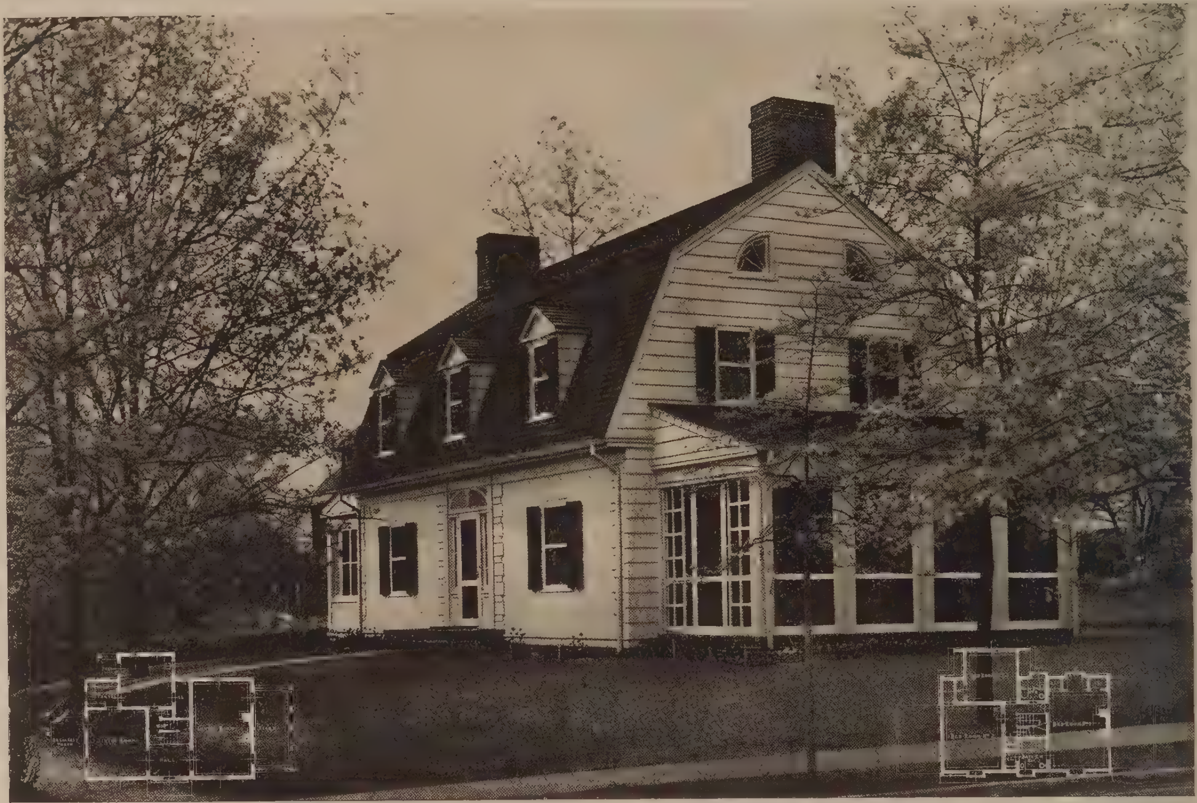

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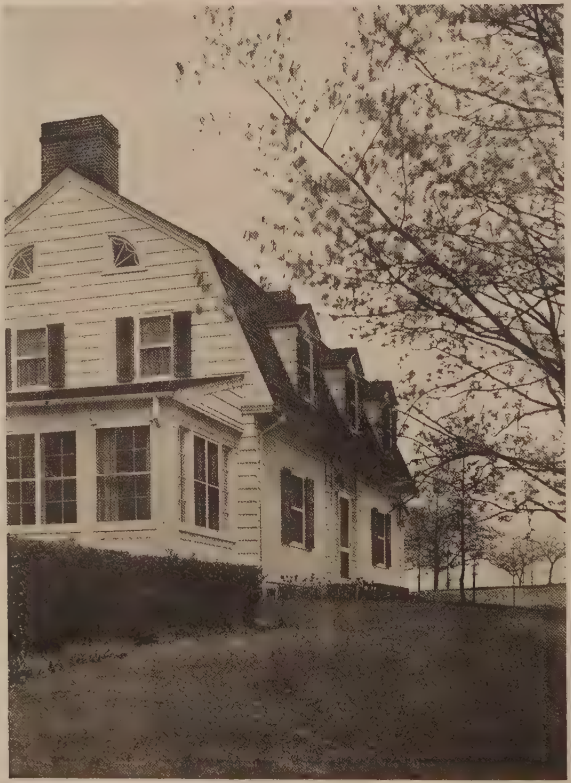

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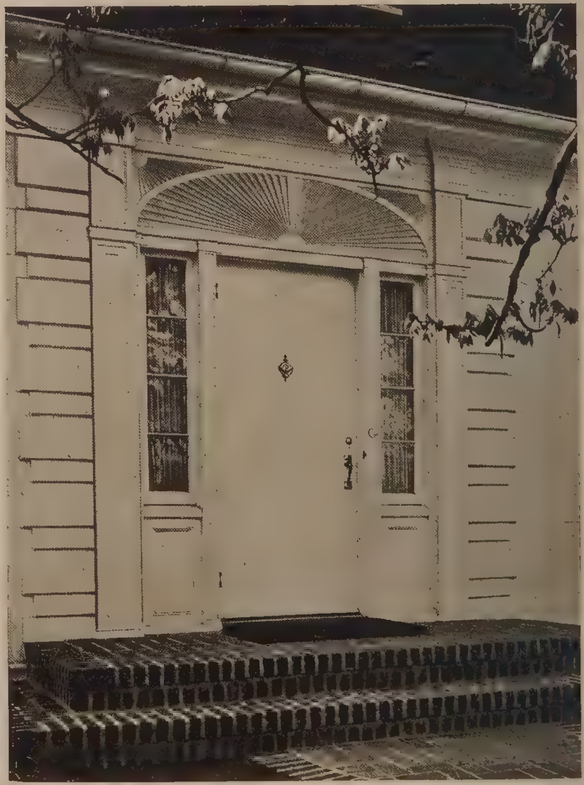


Entrance.

HOUSE, D. W. NYE, KEW, LONG ISLAND. Aymar Embury II, Architect.

(Continued from page 297)

placing of objects at equal distances, at certain angles, on certain balanced curves—why parallelism, co-ordination and concentricity alone, of themselves are causes of interest to the eye and convey a sense of beauty, we shall find these questions in great part answered, if we consider correlativeness as the essence of order, and order the genesis of design. Each part has reference to other; the whole is bounded and bonded by a common, all-dominating law. Whether it be jeweled pendant, concentric circle in rain-splash and ripple, or iso-curving wavelets in a wide-sweeping bay, beauty in major part seems to reside in the sense of order, the existence of law, and the general subservience of part to whole effect. Geometry, as such, we may conceive to have no æsthetic import; but geometry as signifying law and order, and as indicating reciprocal relation of part, such as we see demonstrated in equidistant columns and the regular spacing of flutes, is no doubt the hidden cause—the fount and origin of beauty in architecture.

The principle of correlation induces us to render more pronounced and apparent geometrical form; but the need for variety and foil warns us not to carry the rule too far. If we never go outside our principle, or rather, if we never allow a little play of fancy and abandon, all lightness—the magic and charm of variation—would be stifled. All we need to see is that the change and variation does not occur in weighty matters; that we do not play with form in grave and serious main masses of building. It is in careless treatment of such building masses that want of respect for our principle of correlation—want of a high sense of order—is mainly evidenced. In the preservation of simple mass resides dignity. If we believe that order is reciprocal relation of part, we shall carefully avoid senseless break and change.

LEGAL DECISIONS OF INTEREST TO THE ARCHITECT

These decisions will appear monthly and will be edited by Mr. John Simpson, the well-known lawyer.

Mechanic's Lien for Architect's Services Where No Improvement is Made.

IN September, 1912, a firm of Architects entered into a contract to make plans, with details and specifications, for a building to be erected on the owner's land and to superintend the construction of the building. The compensation was to be 4 per cent. on the cost of the building. The plans and specifications were prepared, submitted to contractors for bids, and delivered, with the bids received, to the defendants in November, 1912. They were retained by the defendants without objection, but they did not accept or reject the bids, or take any action in the matter until May 27, 1913, when they repudiated the contract with the Architects, and abandoned the project of constructing the building. The Architects brought an action in the Minnesota Courts to foreclose a mechanic's lien on the land for their services, in which the principal questions were: (1) Were the plaintiffs entitled to a lien notwithstanding there was no improvement on the land? and (2) Was the lien statement filed in time?

The first question the Court thought to be one of doubt and difficulty. The Minnesota Courts hold that Architects are entitled to liens for services for preparing plans and superintending construction where there is an actual improvement to which their work contributed. Knight *v.* Norris, 13 Minn. 473; Gardner *v.* Teck, 52 Minn. 522; Wentworth *v.* Tubbs, 53 Minn. 388; Wanganstein *v.* Jones, 61 Minn. 262. In each of these cases there was an actual improvement, and in each the Architect not only made the plans, but supervised the construction. It has been held in other jurisdictions that an Architect's services in preparing plans only are not lienable, but the Court was unable to see why plans and specifications do not as much contribute to the construction of a building as does the supervision by the Architect, and well-considered cases so hold.

Is this right to a lien lost when the owner, through no fault of the Architect, does not use the plans or make the contemplated improvement? The Minnesota statute provides that whoever contributes to the improvement of real estate by performing labor or furnishing skill for the erection of a building thereon, shall have a lien "upon such improvement, and upon the land on which it is situated," for the price or value of such contribution. While the statute, if construed literally, does not expressly give a lien where no improvement is begun on the ground, and there had been no case in the Minnesota Courts where a lien was granted when there was no tangible improvement on the ground, yet, construed literally, the Court held that an actual improvement was not necessary to a lien.

The lien statement was filed within 90 days after the owner repudiated the contract. It was held that it was filed in time, though the last work on the plans and specifications was done more than 90 days prior thereto. Lamoreaux *v.* Andersch, Minnesota Supreme Court, 150 N. W. 908.

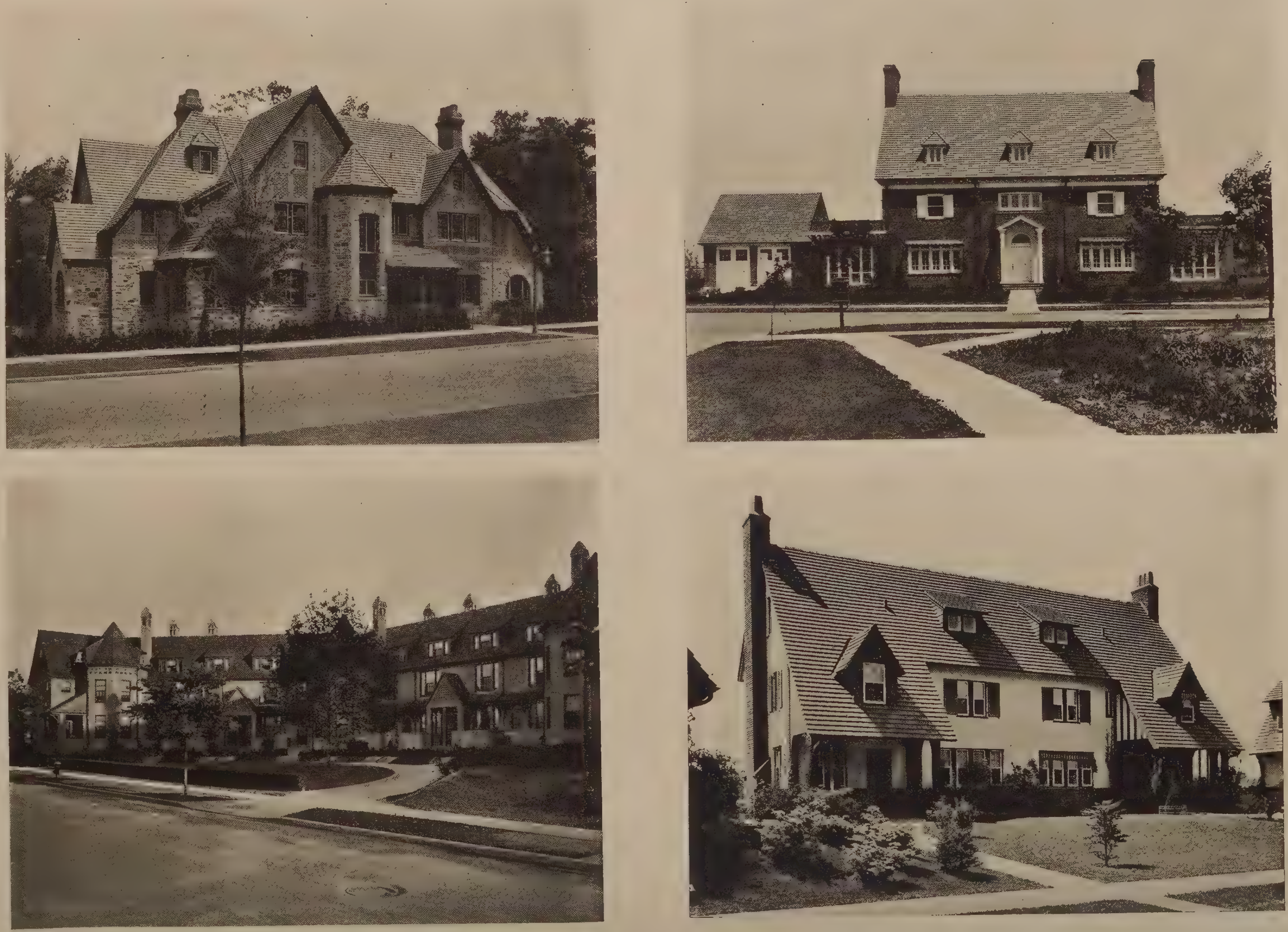
Proof of Stipulation as to Cost of Building.

A contract was entered into by an Architect and a school board, by which the Architect agreed to furnish plans and specifications for a "brick two-story school building, as approved by owner," for which the school board agreed to pay a certain per cent. of the cost of the building. Nothing was said in the contract concerning the cost of the building. In an action on the contract, the Trial Court allowed the district to introduce evidence tending to show that there was an understanding that the plans were to be for a building to cost $10,000 or less; that the approval of the district was conditioned on its ability to let a contract for the construction of the building for $10,000 or less; that the district could not do this, and it requested the Architect to prepare new plans, which he did not do. On appeal, it was held that the introduction of this evidence was not error, as the Architect must have had instruction outside the contract as to the cost of the building. Two justices dissented, on the ground that there was no ambiguity in the contract in connection with the word "approved" and the introduction of the evidence was to admit oral evidence to add to, modify and contradict the terms of a written instrument by showing the intention of the parties to have been different from what is expressed in the writing. Judgment for the school district was affirmed. Bair *v.* School District, Kansas Supreme Court, 146 Pac. 347.

Necessity for Architect's Certificate.

In an action to foreclose a statutory lien of a builder

(Continued page 211)



THE ARCHITECT'S SCRAP BOOK—HOUSES AT FOREST HILLS, LONG ISLAND.

(*Continued from page 209*)

and material man it appeared that it was stipulated in the building contract that the decision of all questions as to the completion of the contract, as well as the builder's compliance with the specifications, should be submitted to engineers of both the contracting parties. The contractor failed to obtain a certificate from the engineer. The Georgia Court of Appeals held that a stipulation in a building contract, to the effect that the compensation of the builder shall be due and payable only on the certificate of a named engineer, is a condition precedent, and that an allegation of compliance with this condition is essential to the maintenance of an action brought to recover the unpaid balance of the compensation provided for in the contract, and to enforce collection by foreclosure of the materialman's lien. And though this stipulation may be waived (as any stipulation of any contract may be waived), still the failure or refusal of the umpire, chosen by the parties, to give a certificate, does not in such a case entitle the builder to sue upon the contract; and certainly if the Architect named in the contract as arbiter (and whose decision as to the completion of the contract is to be final) has given a certificate stating that the contract has not been completed or complied with, a recovery cannot be had under the contract, and a suit upon *quantum meruit,* to recover the value of the services and material furnished, would be the contractor's appropriate remedy. Southern Mfg. Co. *v.* K. L. Moss Mfg. Co. (Ga.) 81 S. E. 263.

CONDITIONAL CERTIFICATE.

A building contract provided for payments being made to the contractor on certificates of the Architects. In an action by the contractor for money, certified by the Architects to be due, their letter to him, accompanying the certificate, given before it was due under the contract, provided, "this certificate is given with the understanding that you are to let Mrs. Watson [the owner] have immediate possession of the house." This the contractor did not do, but kept the keys, and refused to give them up. It was held that the owner was entitled to a nonsuit. Dobey *v.* Watson, South Carolina Supreme Court, 81 S. E. 658.

CONCLUSIVENESS OF ARCHITECT'S CERTIFICATE.

A building contract stipulated that the work should be done under the direction of the Architect, and that his decision as to the construction of the drawings and specifications should be final. No alterations were to be made in the work, except upon his written order. The contractor was to provide at all times facilities for the inspection of the work by the Architect or his representatives, was to remove all materials condemned by him, to take down and remove all work condemned by him as unsound or improper, and make good all work damaged or destroyed thereby. The Architect was to certify if there was any neglect or refusal on the part of the contractor to supply a sufficient force of workmen or a sufficient supply of proper materials, and substantial rights were thereupon to be vested in the owner and substantial burdens to be imposed on the contractor, going so far finally as to allow the owner to terminate the contractor's employment, to exclude him from the premises, and to complete the work at the contractor's risk and his expense, if that expense, to be audited and certified to by the Architect, should exceed the amount that otherwise would be payable to the contractor. The Architect was in the first instance to determine whether any and what allowance should be made to the contractor, if the prosecution or completion of the work should be delayed by the act or default of the owner or of the Architect, or otherwise without fault of the contractor.

In an action on the contract it was held that, looking at these stipulations in connection with the provision that payments were to be made upon certificates to be given by the Architect, they made the Architect a quasi arbitrator, to determine questions arising as to the details of the work, as to the quality of the materials furnished, and as to the character of the work done and the condition thereof when completed, and the work must be done to the satisfaction of the Architect, so as to gain his final approval. His final certificate, made in good faith, was conclusive on the parties. Hathaway *v.* Stone, Massachusetts Supreme Court, 102 N. E. 461.

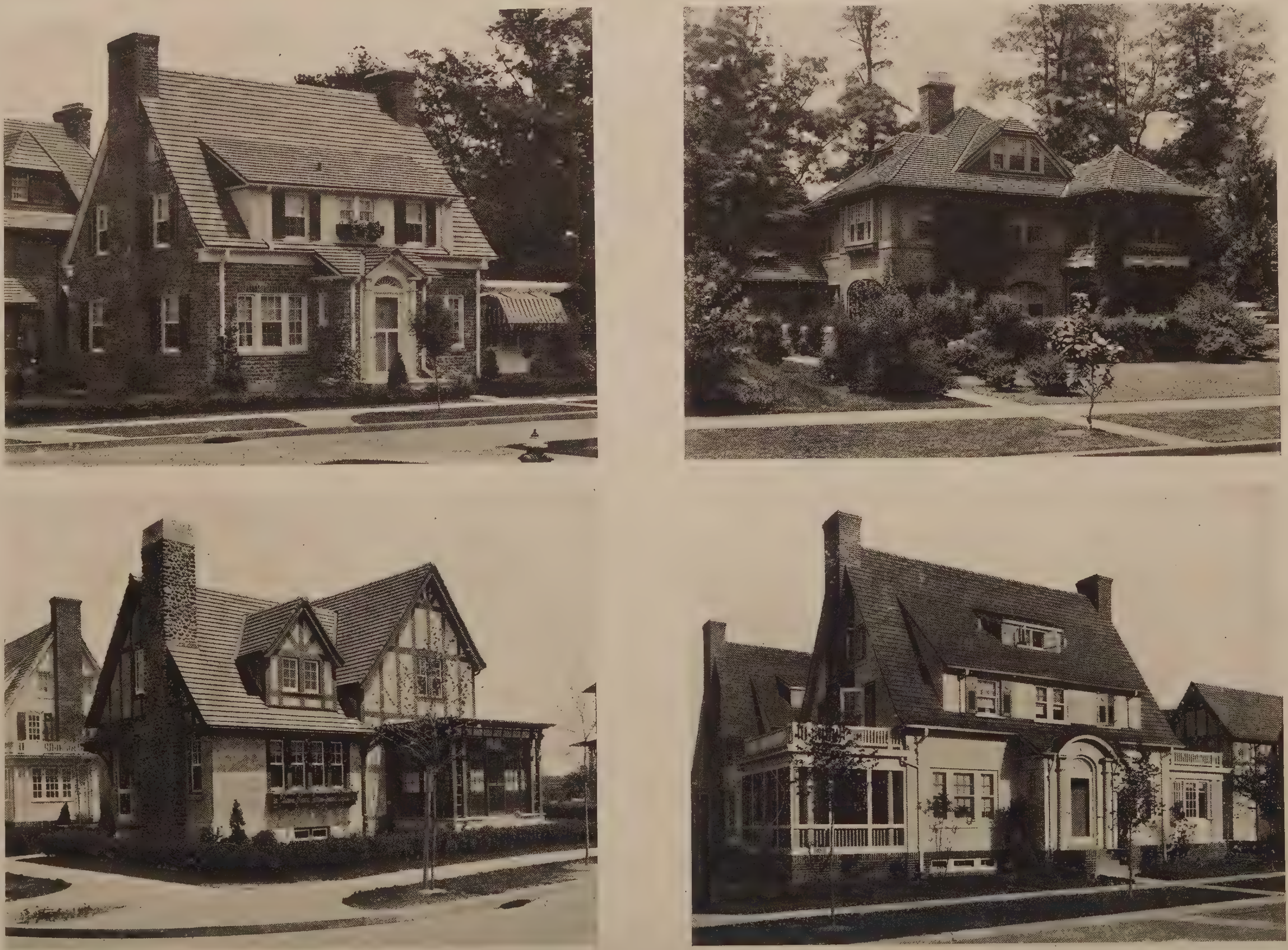
CHANGING PLANS HELD AN EXTRA.

An Architect claimed $262.50 as an extra for changing the plans after the contract had been let. There was some evidence that the changes were made, or agreed to be made, after the bids were received and before the contract was let. The Michigan Supreme Court held that the Architect was entitled to recover whether the changes were, in fact, ordered and made after the bids were received on the original plans or after the contract was let. Johnson *v.* O'Neill, (Mich.) 150 N. W. 835.

CONTRACT BY MANAGER OF CORPORATION—STOPPAGE OF WORK ON PLANS.

In an action to recover the reasonable value of services as Architects in preparing plans and specifications for an addition to the defendant's sanitarium, the defenses were, (1) That preliminary sketches only were furnished, under an agreement that they were not to be paid for unless adopted and used, and they were not adopted and used; and (2) That Nugent, the officer of the defendant company with whom the transaction took place, had no authority to bind the company. The Trial Court found for the plaintiffs and awarded damages to the amount of $400. On appeal the Court found that early in 1910 Nugent, being the owner of a sanitarium, transferred it to the defendant company. The plaintiffs were employed, if at all, in the fall of 1910. At this time Nugent was the general manager of the corporation, owned or controlled nearly all of its stock, actively conducted its business, and dominated its affairs about as completely as he did the business of his sanitarium before it was incorporated. Practically he was dealing with his own property through a corporate agency, as absolutely as he might deal with it as an individual. Up to the time the alleged contract was made the directors did not assume to direct anything. The president of the corporation knew of the proposed improvement and apparently was in favor of it. The Court held that the corporation was clearly bound by Nugent's act in employing the plaintiffs.

As to the point that the plans and specifications were never delivered, the Court said that these were not completed because the plaintiffs were advised that the defendant concluded not to go on with the building, and the plans and specifications were not wanted for that reason. It was not only the right, but the duty, of the plaintiffs to discontinue the work under these circumstances. The judgment for the plaintiffs was affirmed. Fernckes *v.* Nugent Sanitarium, Wisconsin Supreme Court, 149 N. W. 393.



THE ARCHITECT'S SCRAP BOOK—HOUSES AT FOREST HILLS, LONG ISLAND.

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PLATES AND ILLUSTRATIONS

HALL OF PHILOSOPHY, New York University, New York.
Exterior, - - - - - - - - Plate LXXXV
Crow, Lewis & Wickenhoefer, Architects.
OFFICE BUILDING, 8 West 40th Street, New York.
Exterior, - - - - - - - - Plate LXXXVI
Starrett & Van Vleck, Architects.
ST. ALOYSIUS CHURCH, Great Neck, L. I.
Exterior, - - - - - - - - Plate LXXXVII
Rear View, - - - - - - - Plate LXXXVIII
Interior, Facing Altar, - - - - - Plate LXXXIX
Interior, Facing Entrance, - - - - Plate XC
Gustave E. Steinback, Architect.
OFFICE BUILDING, 56 West 45th Street, New York.
Entrance and Lower Stories, - - - - Plate XCI
Upper Stories, - - - - - - Plate XCII
Wallis & Goodwillie, Architects.
HOUSE, Dwight G. Holbrook, Hartford, Conn.
Exteriors, - - - - - - - Plate XCIII
Entrance Detail, - - - - - - Plate XCIV
Entrance Hall and Plans - - - - Plate XCV
Russell F. Barker, Architect.
GARDEN, Mortimer Schiff, Oyster Bay, L. I.
General Views, - - - - - Plates XCVI and XCVII
James L Greenleaf, Landscape Architect.
ART GALLERY, Thos. F. Ryan, 3 East 67th Street, New York.
Entrance, - - - - - - - Plate XCVIII
Carrere & Hastings, Architects.
REJERIA OF TEE SPANISH RENAISSANCE.
Reja of the Coro, - - - - - - - - - 193
Details, - - - - - - - - - - 194
ORNAMENTAL TILE.
Garden Details, - - - - - - - - - 196
Group of Chimneys, - - - - - - - - 198
Leon V. Solon.
GARDEN COTTAGE GROUP.
Perspective and Plans, - - - - - - - 200
Bates & How, Architects.
PENN. STATE PAVILION, San Francisco.
Exterior, - - - - - - - - - - 202
Interior and Plans, - - - - - - - - 204
Henry Hornbostel, Architect.
HOUSE, Henry Brewer, New Haven, Conn.
Exterior—Entrance Hall—Plans, - - - - - 206
Aymar Embury II, Architect.
HOUSE, D. W. Nye, Kew, L. I.
Exterior—Entrance—Detail—Plans, - - - - 208
Aymar Embury II, Architect.
THE ARCHITECT'S SCRAP BOOK.
Houses at Forest Hills, L. I. - - - - - - 210-212
MONTHLY PICTORIAL REVIEW OF OUR CONTEMPORARIES, - - - - - - - 216-xxii
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EDITORIAL

THE NEW BUILDING CODE OF THE CITY OF NEW YORK—AN ARCHITECT'S SIGNATURE ON HIS WORK—A CONTRACT IS A CONTRACT

THE old building code of the City of New York has been a constant source of annoyance for many years, and a difficulty to all the men who had to work under it. The passage of the new code has been urged by various committees of architectural associations, of real estate associations and of contractors' associations, and the code at last seems to be in a fair way to be put through. About eight years ago a new code was prepared and put before the Board of Aldermen; it was adopted by the Board, but was vetoed by the Mayor because of charges made through the newspapers that the code unduly favored the hollow tile system of floor construction to the prejudice of the various forms of reinforced concrete. It has been stated in the papers that friends of Charles F. Murphy had a financial interest in the hollow tile industries, while the friends of Richard Croker were interested in businesses which would be benefited by permission to use reinforced concrete, and that the political row between them was carried over into the building field.

Two years later, in 1908, the code was brought up again but failed of passage. In 1913 a special committee prepared a new code which was, in almost all respects, satisfactory. This special committee was composed of representatives of the Architects, the real estate interests, the building contractors and the Board of Fire Underwriters, etc., but the code so prepared was never voted on by the Board of Aldermen. The present Board has been getting out a new building code by taking it up section by section, and as they have recently passed the sections which have caused most disputes, it is probable that the entire code will be completed before very long.

The three sections recently passed which cover fireproof construction, reinforced concrete construction and masonry construction have been the basis for the former disputes and as finally adopted seem to cover the situation with fairness to all interests, and without disregard to the most important of all interests, that which the public has, in the safety of buildings and in economy of construction. The compromise sections permit cinder concrete to be used for floor construction; hollow tile may be used for wall construction of dwellings not more than forty feet high, the idea being to permit masonry construction of the most economical type, hoping that it will supercede wood in the urban district.

The new code permits a 12″ masonry wall to be built of 4″ of brick and 8″ of terra cotta, and also decreases to some extent the wall thickness of tall buildings of skeleton construction. These have hitherto been excessively heavy and it would seem are still required to be somewhat heavier than is necessary. Mason work in a steel building is, after all, intended as a fireproof covering for the steel, and not as a bearing construction, and if six or eight inches of mason work will fireproof the steel on the uppermost stories it is probably enough to fireproof the steel on the lowest ones. But it is said that the Bricklayers Union has brought to bear all the pressure they could to have required as much masonry work as possible, and that manufacturers of fireproof material have taken the same stand, so that while the amount of material required for exterior walls of fireproof buildings has been somewhat reduced, it is still excessive.

Under the fireproofing section the following materials are classed as acceptable:

(*a*) Bonded brickwork laid in cement mortar.

(*b*) Concrete, consisting of one part Portland cement and not more than two parts of sand and four parts of gravel, stone or other approved aggregate that will pass through a three-quarter inch ring, suitably reinforced with wire or metal fabric.

(*c*) Cinder concrete, consisting of one part Portland cement and not more than two parts of sand and five parts of clean, well burned steam boiler cinders, suitably reinforced with wire or metal fabric.

(*d*) Porous or semi-porous terra cotta blocks, with shells and webs at least one inch thick, laid in cement mortar, thoroughly bonded or secured by metal ties.

(*e*) Solid gypsum blocks, containing not more than 25 per cent. by weight of cinders, asbestos fibre, wood chips or vegetable fibre, laid in gypsum plaster of cement mortar, thoroughly bonded or secured by suitable galvanized metal ties or fabric.

(*f*) Any material or form of construction that will resist the action of flame and a heat of 1,700 degrees Fahrenheit for at least two hours, without raising the temperature of the material to be protected above 550 degrees Fahrenheit, by transmission through a thickness of two inches, as determined by test prescribed in the rules adopted by the Superintendent of Buildings.

This clause seems very sensibly written in that it permits all the material commonly regarded as fireproof to be used, and also opens the way to the use of new materials as they may be found to comply with the necessary tests to make them safe.

The passage of this new code has been a matter of very great interest to all the Architects practicing in New York City, and will lighten their labors to a very considerable extent. The present code is antiquated, illogical and confused, and has been so very greatly modified by departmental rulings which have varied in the various boroughs of the city, that practically nobody knew whether his drawings complied with the law or not until they had been in the department, had been examined, and had been revised to suit the particular examiner who had gone over them. Even then the Architect could not be sure that the requirements of this examiner would not be revised by higher authorities, and a definite, logical and sensible code will not only very greatly assist the Architect in the preparation of his drawings, but will also much reduce the cost of construction to the owner.

THERE has been some discussion of late on the old question of the right or duty of the Architect to sign his work. A painter signs his picture, a musician signs his music, and the sculptor signs his statuary; why should not an Architect sign his building? Certain men have made it a practice to have their names cut in their buildings in some inconspicuous spot, and it seems in a way a rather pretty thing to do but it is not a matter of very general practice at the present time, and it so happens that most of the signed buildings which the writer has seen have not been buildings which one would believe very likely to preserve or enhance the reputation of the men who have designed them. For the most part our big and beautiful buildings are unsigned, and famous and important Architects or firms of Architects do not seem to make it a matter of custom to attach their names to their work. There has, however, been a very steady increase in the tendency to give credit to the Architect when illustrating or describing some new building of importance. Some years ago, if a new school were opened, the principal of the school, all the teachers, all the members of the board, all the local politicians, the Mayor of the town and the third janitor's helper got their names in the paper, but the Architect was not mentioned. Now he is, and his importance has so increased that he ranks somewhere between the substitute in the Primary Department and the night watchman. At any rate he is beginning to be recognized. Likewise in the tablets which are created on our larger buildings describing their construction, the Architect's name is now generally included. In the Pennsylvania Station, for example, McKim, Mead and White, while they do not yet occupy Abou Ben Adhem's conspicuous position, are at least mentioned in the same size type with the Board of Directors; and in the municipal work recently erected in New York the names of the Architects are generally inscribed on the tablets. In such buildings as these, separate signature hardly seems necessary, but on the whole it would seem that the practice of signing buildings may be followed with advantage.

There is no particular reason why buildings should not be signed unless they are ugly and their authors are ashamed of them. In most cases owners are perfectly willing to have the Architects put their names on them, and it might be very often useful to a man to have the public know that he was the designer of a certain building, and that he was a little proud of it.

Probably the only thing that has stood in the way of such signatures in the past has been some feeling of modesty or diffidence on the part of the profession; it is a modesty which is not exactly customary in other spots, and which probably should not prevail in this. It has been suggested that the various chapters of the American Institute make an organized effort to have the Architects sign their buildings, and such a general acceptance of the practice would probably result in its uniform adoption, for the Institute does after all include a great majority of the men of standing and good practice.

Architecture, for one, would like to see buildings signed and ventures to express a hope that the practice will became common.

THERE is one thing which none of the average owners, and not very many of the builders seem to understand: it is that in executing a contract for the construction of a building they have really entered into an agreement which the law expects them to abide by. Too many people regard a contract simply as a sort of basis for negotiation; a ground for discussion. The clause which the owner most frequently disregards is that in regard to payments; too often an owner does not foresee the exact amount of money which he will be compelled to raise on a certain date to meet the certificate issued by his Architect in favor of the builder and delays making the payment, or offers notes in place of cash, thereby violating his agreement with the builder. Most owners do not seem to realize that the payment falling due under a building contract differs from a bill presented by a commercial house, and cases have not been rare where owners have asked for discounts for cash if they paid at once. Very commonly owners do not realize that payments should be made upon receipt of the Architect's certificate, and within the time limit fixed in the contract for such payments; nor do they appreciate the fact that a failure to make such payment promptly is a violation of their contract.

The clause which builders most commonly disregard is the one fixing the date of completion. The average builder seems to look on the date of completion named in his contract as a mere statement of the time when the owner would like to occupy the premises if things happen to work out right, and does not take it to be as much a part of the agreement as the quality of bricks and mortar which he is to put in the job.

As a matter of fact the courts have held over and over again that a failure to complete the contract by the date set renders the builder liable for damages to the owner and that these damages can be collected by law. This attitude about the clause in regard to the time is not confined only to the builder; the Architect also very frequently fails to furnish details which may be necessary to enable the builder to complete his work, without feeling that he is doing the owner any injustice or that he is putting the contractor in a position where he must violate his agreement in one of two respects; he must either proceed without details, or delay his work.

The building contract is a very clean cut straight-forward sort of proposition, one in which there is very little liability for mistake on the parts of the signatories, which should be lived up to in every particular, and which can be lived up to, without any inconvenience to the contracting parties or to the Architect.

Another clause which is very frequently violated by the Architect and the contractor and the owner, all three, is on the question of extra work. Practically all contracts provide that the cost of extra work must be determined in advance and authorized by the Architect in writing. It is very likely that in not one job out of ten are all the extras approved in writing, and yet it is not at all a difficult thing to have them so approved before the work proceeds.

A somewhat more careful observance of the very explicit and simple terms of the average building contract would, as a rule, not only facilitate the progress of the work, but would also reduce the liability of friction and legal action to a minimum.

AMERICAN ACADEMY IN ROME.

THE usual competitions of the Academy were held this year.

The Fellowship in Architecture was awarded to Philip T. Shutze, of Columbia University and Georgia School of Technology.

The Fellowship in Painting was awarded to Russell Cowles, National Academy of Design, New York.

The Fellowship in Sculpture was awarded to Joseph E. Renier, National Academy of Design, New York.

The Fellowship in Landscape Architecture was awarded to Edward G. Lawson, Cornell University.

These Fellowships are of the value of $1,000 a year for three years.

The Competition Drawings for the above Fellowships will be on exhibition in the Assembly Room, Fine Arts Building, 215 West 57th Street, New York City, from July 26th to September 4th, 1915, between the hours of 10 A. M. and 5 P. M., daily, except Sundays.

The UNIVERSITY OF PENNSYLVANIA *offers courses in ARCHITECTURE as follows:*

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3. A special two-year course for qualified draftsmen with options in design or construction; leading to a professional certificate.
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For circular giving complete information regarding the courses, requirements of admission, advanced standing, summer school, fellowships and scholarships, etc., address Dean of the Towne Scientific School, University of Pennsylvania, Philadelphia, Pa.

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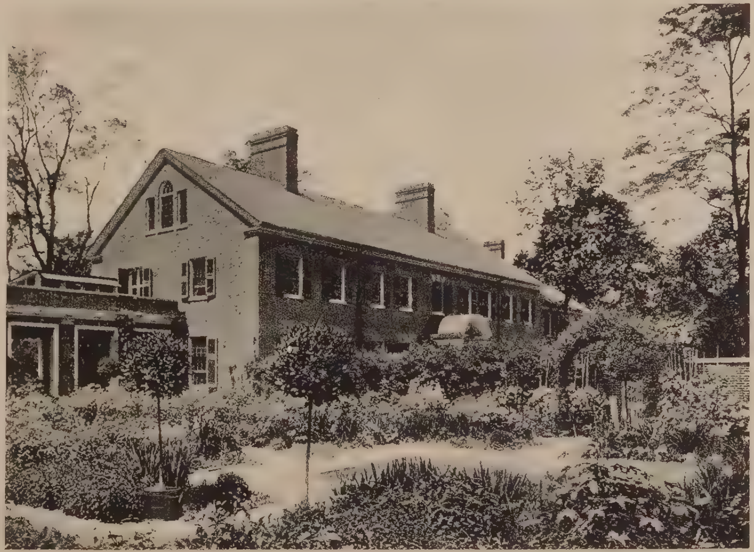
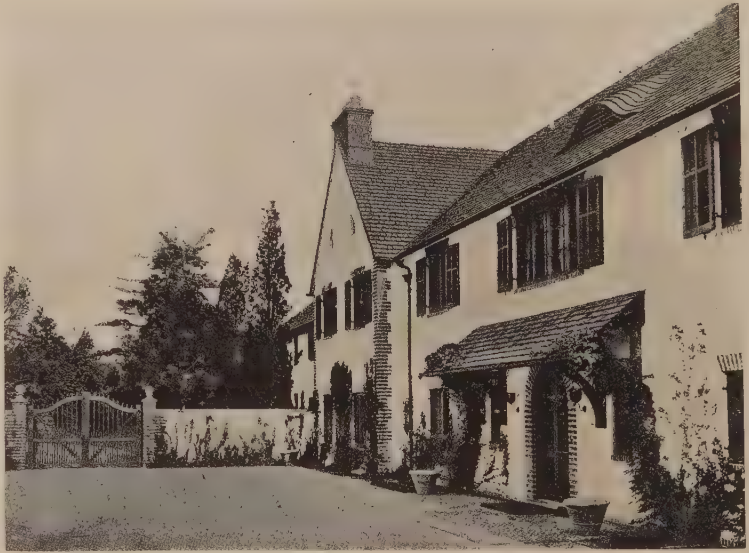


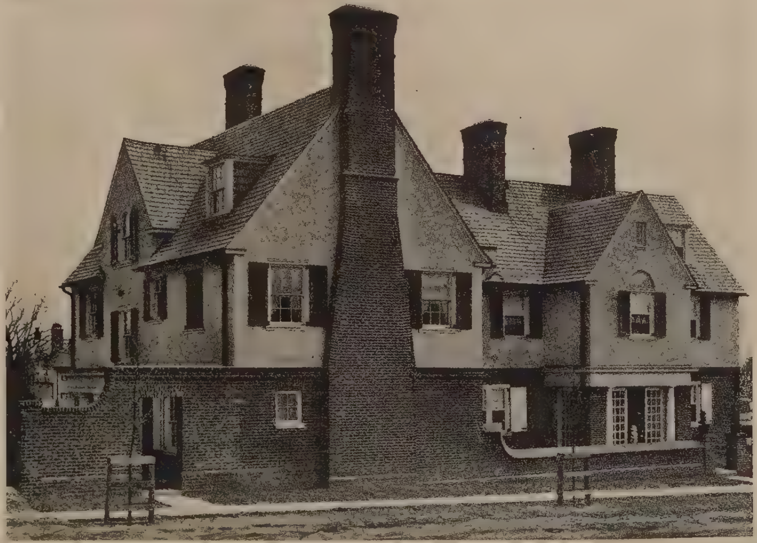
View across Garden, House, F. M. Weld, Huntington, L. I　Chas. A. Platt, Architect.

American Architect.



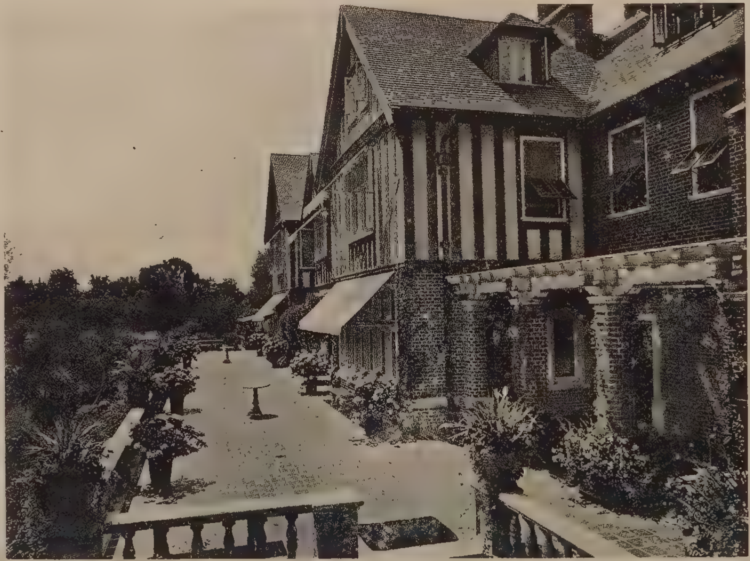
Entrance Front, House, Bronson Winthrop, Syosset, L. I.　Delano & Aldrich, Architects.

Brickbuilder.



Double House at St. Martins, Pa.　E. B. Gilchrist, Architect.

Brickbuilder.



View along Terrace, House, E. D. Speck, Grosse Pointe, Mich.　A. H. Spahr, Architect.

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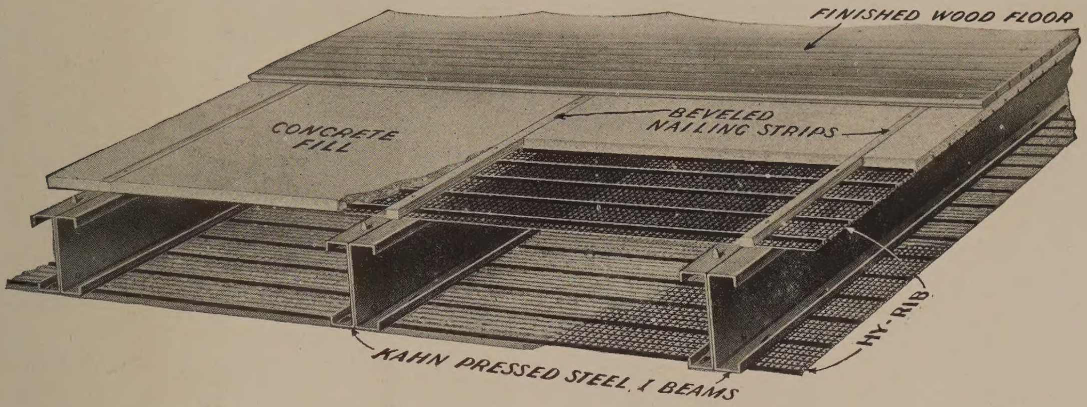

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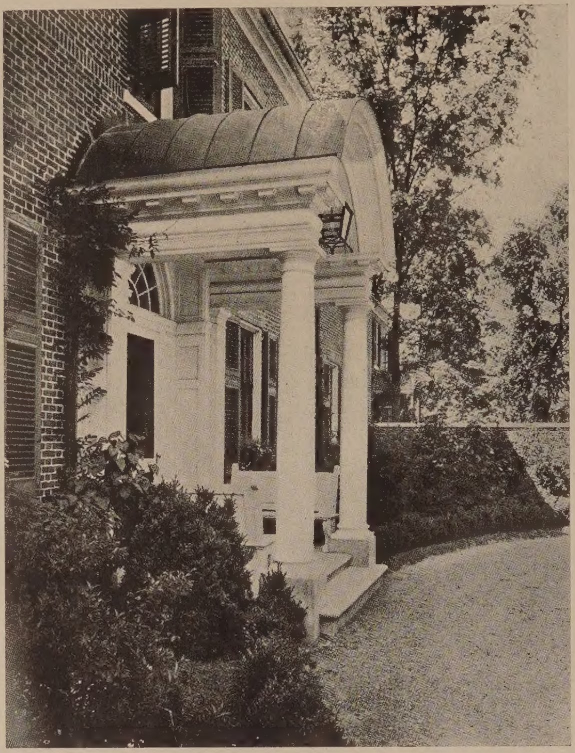
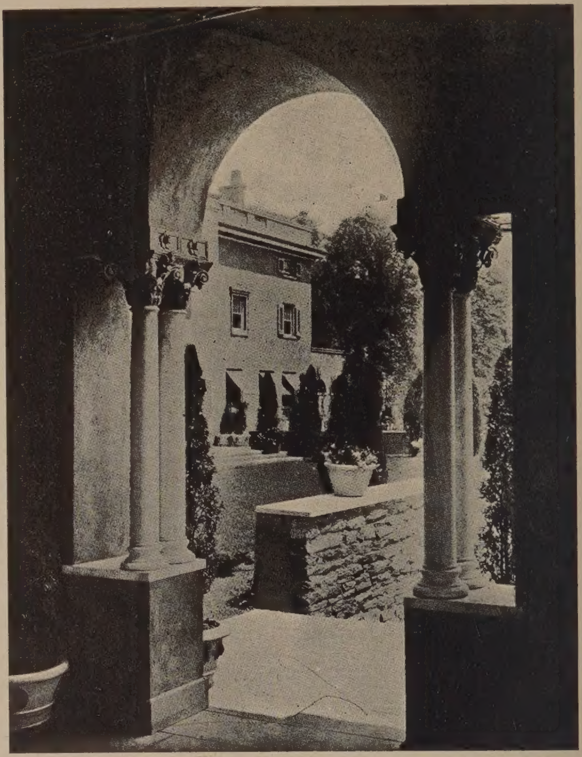


Entrance, House, F. M. Weld, Huntington, L. I.
Chas. A. Platt, Architect.

American Architect.



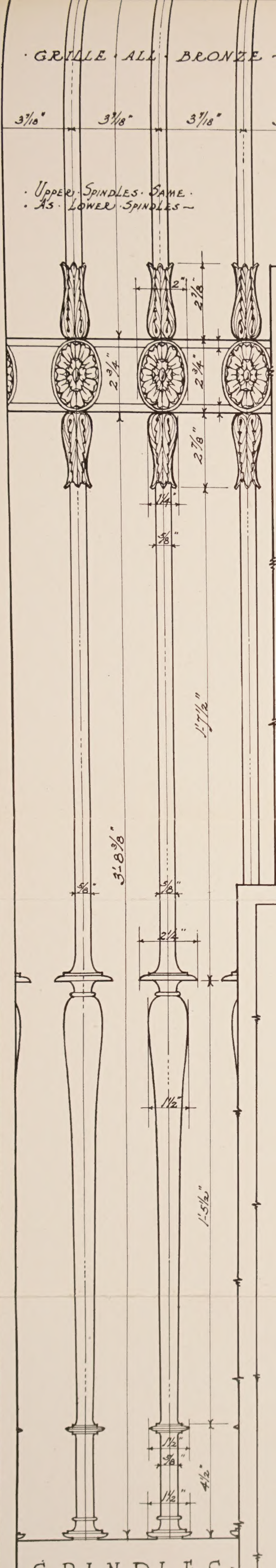
Upper Terrace, House, E. K. Rowland, Radnor, Pa.
Zantzinger, Borie & Medary, Architects.

American Architect.

Terrace, House, F. M. Weld, Huntington, L. I.
Chas. A. Platt, Architect.

American Architect.

View along Terrace Front, House, F. M. Weld, Huntington, L. I.
Chas. A. Platt, Architect.



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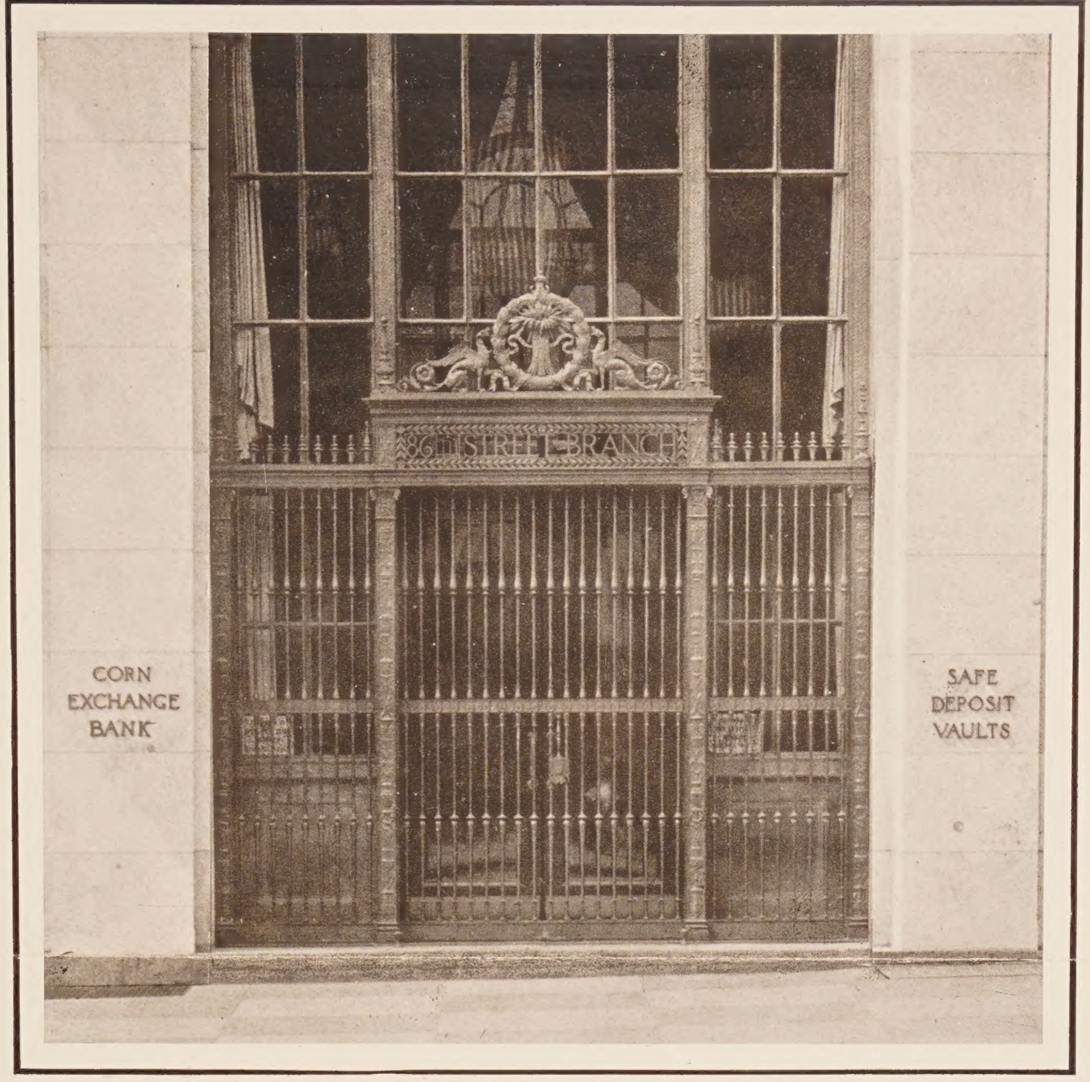

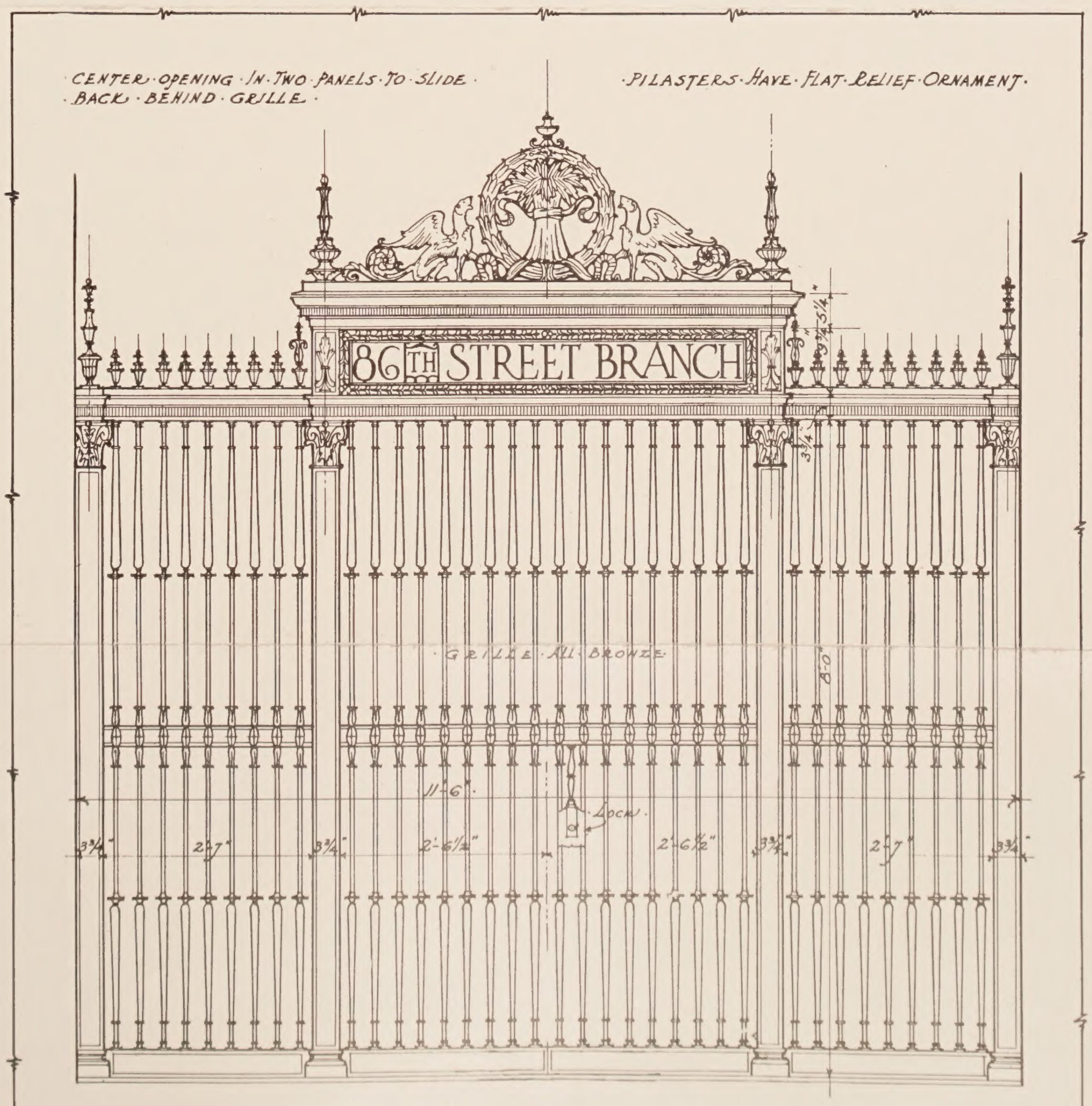
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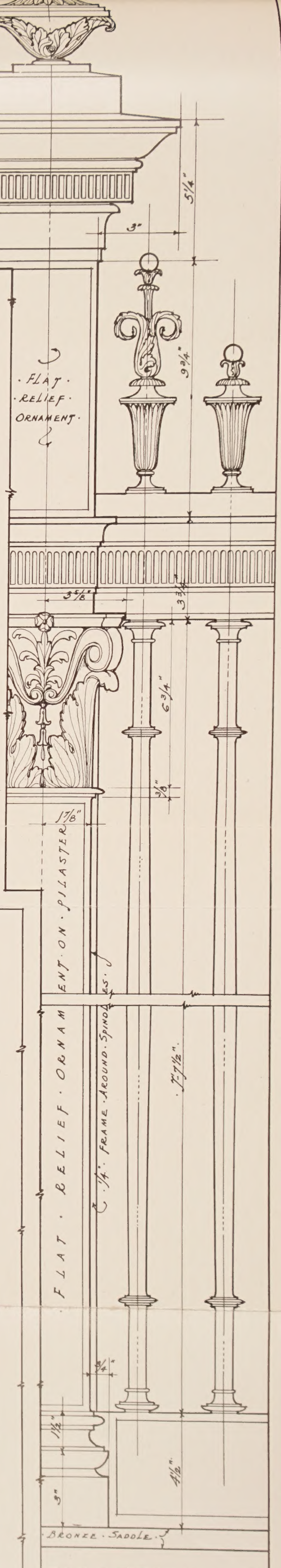
2'-6½"
3¾"
2'-7"
3¾"

,ONE, HALF, INCH, SCALE, ELEVATION,



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